## A Systemisation of Types of Feedback: Similarity and diversity; how can types of feedback, developed and used in empirical studies in the field of higher education, be typified? (0243)

In this paper I will address the problem of fragmented treatment in the empirical research literature of one aspect of the phenomenon feedback; **type of feedback.** Many researchers have investigated this aspect, but no one has done an in depth systematisation of the different types. Systematisation, for example in the form of typification, is important in any field. It comprises a necessary step when theorising by "tidying up" aspects of the phenomenon. Typification enables researchers to make better judgments about what is central to the phenomenon and thus should be accommodated in the emerging theory. This paper is a contribution to such a systematisation.

Empirical studies have given us extensive knowledge about feedback. The phenomenon is researched from different angles, contexts, disciplines and modes. Examples are; the nature of feedback given (type), how this feedback is utilised by students (use) and the prerequisites for effective feedback (conditions for learning). Generally much effort is put into researching all parts of the feedback process, but I find that too little effort is put into organizing and systematizing existing knowledge in the field. A literature review of research articles on feedback in the field of formative assessment (work in progress) revealed fragmented treatment of types of feedback. Other studies have revealed definitional confusion even when it comes to the main terms; feedback (Price et al. 2010), formative assessment (Black and Wiliam 1998) and assessment in general (Taras 2005). Quoting Carless et.al. (2011); "feedback is clearly an issue in need of further analysis" (p.395).

In this paper I will look at type of feedback, one aspect of the phenomenon feedback, often studied empirically. I will classify the types of feedback found in studies where type is the main object of study. The overall aim is to review this aspect, for others to build theory, and in that way contribute to progress in the field. I used different approaches when searching for articles to include. First I read other relevant review articles. Second I searched the main academic databases. Third I followed-up relevant references in the articles found (snow-ball approach). I decided to conduct the search with one overall search-criteria; publishing year (after 1989). After careful consideration of this material I ended up including eighteen articles proposing 164 different types of feedback. All the articles were read, and a temporary coding of the types was made using a tool for qualitative data analysis (WeftQDA). Terms used to describe types of feedback are for example; asking for reflection, pointing at errors, explaining 'how-to' do something, give an explicit recommendation, suggesting approaches, give advices, encouraging discoveries and correcting mistakes. After this preliminary work I then started systematising the different types. My aim was to create a simple and thereby understandable but inclusive classification of types. There are many ways to systematise phenomena in general. One common principle is to look for similarities and diversities (Rosch 1978). We look for qualities that bring phenomena together and qualities that differentiate them. We consider which qualities are sufficient and which are essential. For a classification of types to be meaningful the differences and similarities are represented by the axes or classification coordinates. I chose an iterative strategy when creating the classification and I tried out different axes resulting in very different classifications. After a thorough and hermeneutical process I ended up using a simple two-dimensional classification. The two dimensions were related to how we derive knowledge (epistemological axis) and knowledge itself (ontological axis). After choosing these axes one underlying problem became evident. 25 of the 164 types couldn't be mapped in this system. I looked closely at these types and found that I could group most of them into one super category which I have labelled meta-feedback. This feedback is about the relationship between student and teacher and the conditions for establishing effective learning. I have started to work on a review of meta-feedback, but in this paper I will present the contentoriented classification.

The two axes of this classification (epistemological and ontological) ranges from prescriptive to descriptive. Prescriptive means that the teacher has decided beforehand what the learning outcome should be ("closed"), in regard to knowledge claims (ontological) and/ or methodology (epistemology). The other end of the axes is intuitively the opposite. The teacher hasn't decided the learning outcomes ("open"). Four main types of feedback were discovered (Appendix A); corrective feedback, directive feedback, procedural feedback and reflexive feedback, all with potential sub-categories. These types were placed in the classification depending on its relation to the two axes. Reflexive feedback is regarded as the most open type (e.g. asking for reflection, encouraging discoveries). Here the student co-decides which methodology should be used and eventually the knowledge claims (the student's description of a phenomenon is framing the feedback). Corrective feedback on the opposite (diagonally) side is very different from reflexive feedback, whereas both method and knowledge claims are prescribed by the teacher (e.g. pointing at errors, correcting mistakes). Directive feedback has similarities with both the first types, whereas knowledge claims are prescribed (as in corrective feedback) and choice of methodology is open (as in reflexive feedback), e.g. give recommendations and advices. Procedural feedback on the opposite (diagonally) side has open student derived knowledge claims and a prescribed methodology (e.g. suggesting approaches, explaining 'how-to'). Describing types along dichotomies of openclosed, could lead to assumptions of open equals good equal learning, and closed bad and no learning. This is not the case. Corrective feedback could be effective and valued by students, and make them feel both happy and motivated. Reflexive feedback could lead to anger and desperation, and be demotivating.

I have started the work reviewing two other important aspects of feedback as well; **use of feedback** and **conditions for effective feedback** (including meta-feedback). These reviews will be used in my empirical research on feedback in higher education when analysing empirical data. I aim to establish a theoretical understanding of the connection between these three phenomena. The relationship is important when investigating the complex processes and interactions central in any feedback cycle.

## REFERENCES

Black, P., and Wiliam, D. (1998). "Assessment and classroom learning." Assessment in education, 5(1), 7-74.

- Carless, D., Salter, D., Yang, M., and Lam, J. (2011). "Developing sustainable feedback practices." *Studies in Higher Education*, 36(4), 395-407.
- Price, M., Handley, K., Millar, J., and O'Donovan, B. (2010). "Feedback: all that effort, but what is the effect?" Assessment & Evaluation in Higher Education, 35(3), 277-289.
- Rosch, E. (1978). "Principles of categorization", in E. Rosch and B. B. Lloyd, (eds.), *Cognition and categorization*. Hillsdale, N.J.: Erlbaum, pp. VIII, 328 s.
- Taras, M. (2005). "Assessment–summative and formative–some theoretical reflections." *British Journal of Educational Studies*, 53(4), 466-478.

## **APPENDIX A**

## SYSTEMATISATION BASED ON EIGHTEEN EMPIRICAL RESEARCH ARTICLES IN THE FIELD OF HIGHER EDUCATION

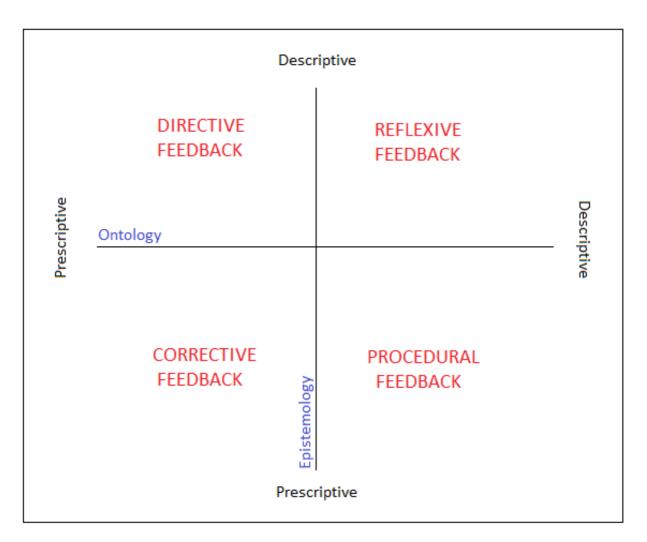


Figure I. A classification of one aspect of the phenomenon feedback; type of feedback