

The research-teaching nexus: Does discipline matter?

Introduction

Do academics' disciplinary backgrounds affect the way they (would like to) link research and teaching? This paper will discuss whether 'discipline is essential to the research-teaching nexus' or whether 'discipline is not that important'.

Many researchers (Barnett, 2003; Neumann, 1993; Smeby, 1998) have noticed distinctions between the disciplines in the way research and teaching are related. Disciplinary differences have been found in academics' conceptions of research and teaching. Regarding research, the disciplines differ in what they consider to be 'new' knowledge. A critical issue is the question whether synthesising and refining existing knowledge and offering new interpretations constitute 'new' knowledge and hence should be considered research (Neumann, 1993). Hativa and Marincovich (1995) indicated that disciplinary differences in teaching are related to epistemology and the culture of the disciplines. For example, curriculum differences echo the nature of knowledge: cumulative in the hard disciplines and holistic in the soft disciplines (Neumann et al., 2002). Robertson (2007) reported differences in conceptions of the research-teaching nexus itself: generally, the hard disciplines favour a view that research and teaching have only a tenuous link, the soft disciplines that teaching and research are strongly related or integrated.

In contrast, others state that the importance of the discipline is overestimated based on the fluidity of disciplinary boundaries (Brew, 2008) and findings that the differences within disciplines are many times as large as the differences between them. Quinlan (1999) found that key differences concerning historians' beliefs, orientation towards the discipline, and approaches to teaching run along generational and gender lines. Empirical studies that found no disciplinary differences include Brew's (2001) study on the conceptions of research and Stes et al.'s (2008) study on teaching approaches.

This study aims to contribute to the debate by relating academics' preferred types of research-teaching nexus and their conceptions of knowledge, research, and teaching to disciplinary differences. Based on the suggestion that differences might be attributed to other aspects of academics' backgrounds (Huber, 1990; Quinlan, 1999), age, sex, and position were also included.

Methods

Thirty academics from the Faculty of Humanities participated in this study. They were equally distributed over the disciplines Culture & Literature, History & Art history, and Linguistics. All disciplines are considered to be soft-pure disciplines, however Linguistics is considered 'harder' than Culture & Literature and History & Art history. For every respondent the following data were available from previous qualitative studies (Authors 2009; 2010): knowledge conceptions, research conceptions, teaching conceptions, and preferred research-teaching nexus. All conceptions were placed on a dimension (see Figure 1). Five profiles were identified concerning the preferred nexus: *Teach research results*, *Make research known*, *Show what it means to be a researcher*, *Help to conduct research*, and *Provide research experience*.

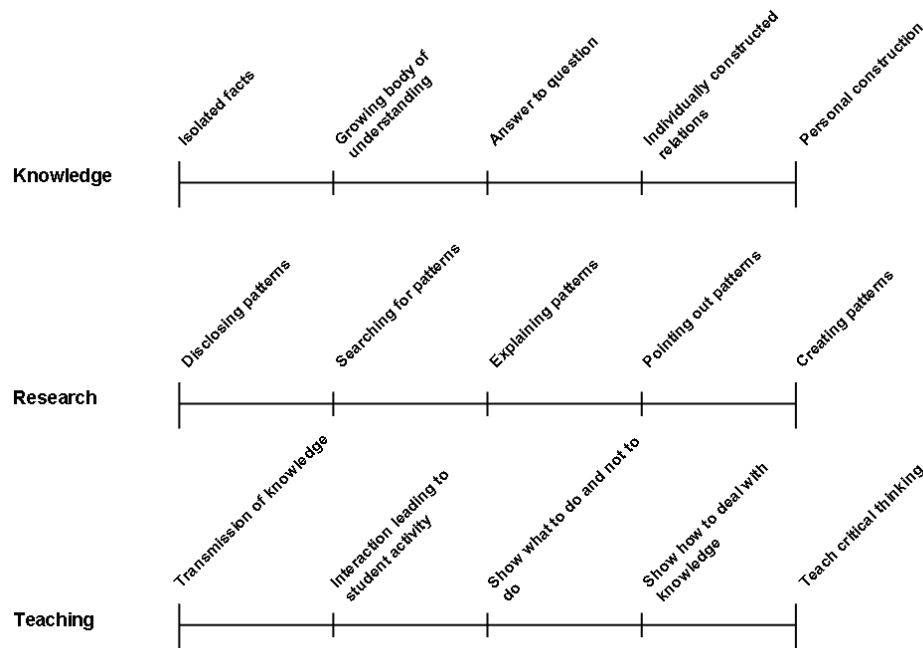


Figure 1. Conceptions of knowledge, research, and teaching

First, chi-squares were calculated to test whether the discipline was related to the preferred research-teaching nexus. Second, Kruskal-Wallis and Mann-Whitney tests were used to identify relations between disciplines and conceptions of knowledge, research, and teaching. Third, Kruskal-Wallis tests and Bonferroni inequalities were used to determine whether the preferred research-teaching nexus was related to knowledge, research, and teaching conceptions. Fourth, relations between the preferred research-teaching nexus and respondents' sex, ages, and positions, were explored using chi-square tests.

Results

No overall significant differences were found between disciplinary background and preferred research-teaching nexus or teaching conceptions. Significant differences were found for knowledge and research conceptions. Linguistics differed from Culture & Literature on a 5% level ($Z = -1.739$, $p = .041$; $Z = -1.739$, $p = .041$) and from History & Art History on a 10% level ($Z = -1.625$, $p = .052$; $Z = -1.512$, $p = .065$). On the dimension *knowledge as a personal construct* to *knowledge as facts* Culture and History academics leaned towards personal construct, while linguists leaned towards facts. Academics within the disciplines of Culture and History professed conceptions closer to *research as patterns created by the researcher*, while a conception of *research as disclosing patterns* was more typical of linguists.

No associations were found between academics' knowledge or research conceptions and their preferred type of the research-teaching nexus. A significant association ($H = 12.973$, $df = 2$, $p = .011$) was found between teaching conception and the preferred research-teaching nexus. The profile *Help to conduct research* was associated with a conception of teaching as *knowledge transmission* and *interaction leading to student activity*, while the profile *Show what it means to be a researcher* was

associated with a conception of teaching as *showing how to deal with knowledge* and *teaching students to think critically*. A significant correlation was found between position and the preferred research-teaching nexus ($\chi^2 = 12.633$, $p = .013$). Full and associate professors were overrepresented in the profiles *Make research known* and *Show what it means to be a researcher*, while assistant professors were overrepresented in *Teach research results* and *Help to conduct research*.

Conclusions

No relation was found between academics' preferred research-teaching nexus and their disciplinary backgrounds. A closer look at the underlying concept, nevertheless, showed that there were relations between knowledge and research conceptions and disciplinary backgrounds. The differences found were comparable to earlier findings by, among others, Becher and Trowler (2001), but contrasted with Brew's findings (2001) on the research conception. Teaching conception was found not to be related to the disciplines, which diverged from earlier results by Neumann et al. (2002). Interestingly, the teaching conception was related to participants' preferred research-teaching nexus, as well as position. The focus of attention in the preferred type of nexus shifts from explicitly highlighting research for assistant professors to implicitly including it for associate and full professors. The studied and found relations are depicted in Figure 2.

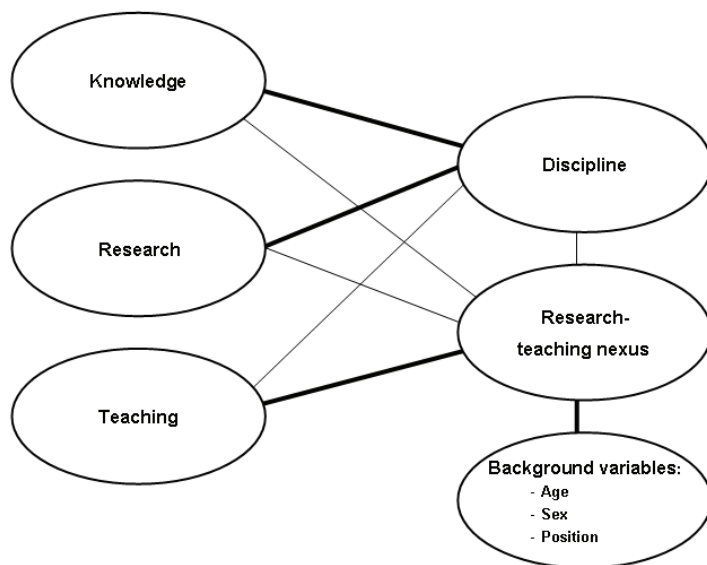


Figure 2. Representation of relations

Our findings have implications for departments, as this study suggests that differences might not primarily be found between disciplines, but between academics within the same discipline/department, based on their teaching conceptions and/or positions. Using the variety of academics' preferences enables departments to develop diverse curricula in which students develop research skills as well as academic dispositions.

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