Pedagogic Aspects of Scholarly Information Literacy: A Course on a Systematic Approach to Literature Reviews

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How to conduct a high-quality literature review is a crucial skill for undergraduate and graduate students, as well as researchers. According to current theoretical and professional frameworks for information literacy (IL), it ought to be a priority for the library to assist its users with review-related tasks (Lalwani, Niehof, and Grochowski, 2018). In this work-in-progress presentation, we discuss pedagogical challenges and course-design solutions in developing a short course on how to perform searches for literature reviews with a systematic approach. The Division of Information Literacy at Chalmers Library will offer this course in 2020.

From the late '90s one type of review—the systematic one— has gained increasing popularity (See Fig. 1), due to several factors such as the exponential growth of scholarly publications and increasing 'evidence-based practices'—from, initially, evidence-based medicine to other diverse fields, for instance evidence-based software engineering (Kitchenham, Dyba, and Jorgensen, 2004).
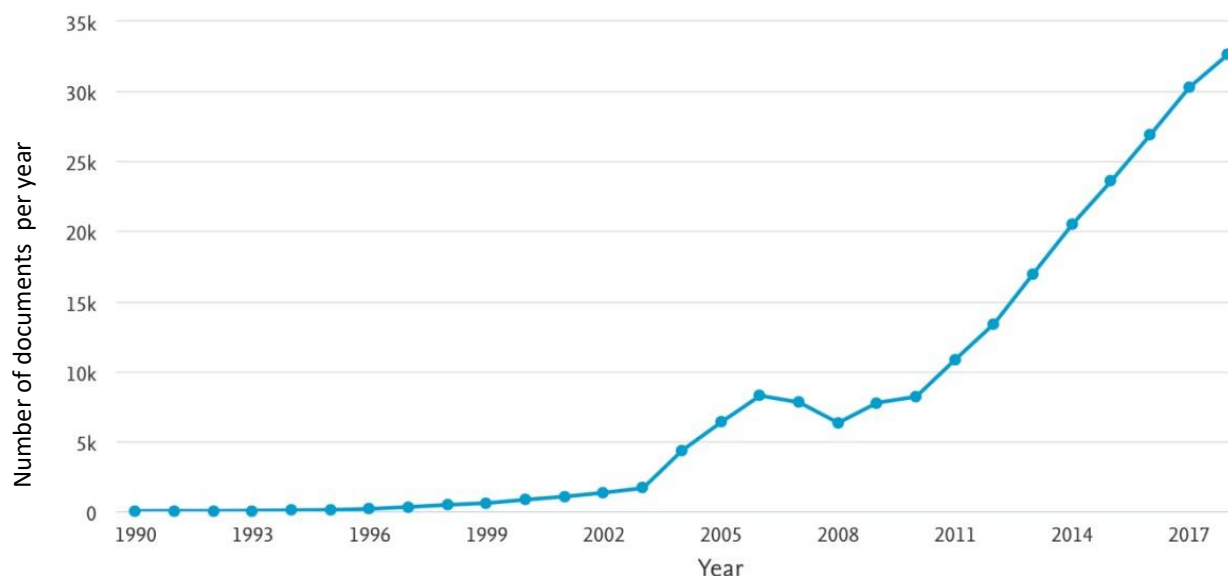

Figure 1. Growth of scholarly output with "systematic review" OR "systematic literature review*" in title, abstract, or keywords between years 1990 and 2018 (N = 230706). Source: Elsevier Scopus. Database search performed on Oct 5th 2019*

As teachers in the course for PhD students *Scholarly Information Retrieval* (Chalmers GTS, 2019), we have noticed that a growing number of doctoral students are expected to write systematic reviews. Writing a literature overview can be a challenging and demanding task, and it requires that the writer is familiar with different review methods (Pickering, Grignon,

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Steven, Guitart, and Byrne, 2014). In the past year, we modified the learning outcomes of the PhD course accordingly, allocating more time to this topic. However, to meet the increasing requests from doctoral students, researchers, and teachers, we decided to design a new three-day stand-alone course intended for this audience, as well as other librarians. There are several courses available on the topic of systematic reviews, online and on-site, in both a national and international context. Since most of them have their focus on the healthcare field, we wanted to create a course based on the learning needs we identified in our practice. According to our experience, we identified several pedagogical challenges. For example, how to train students identifying a suitable review method according to their research questions and resources. Another challenge is to teach early career scholars who come from different epistemological traditions. We had to have then a broader approach involving a large variety of review models, approaches, protocols and evaluation tools for existing reviews. The course comprises three different sessions, and each session covers a specific part of the review process (additional information available online).

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