基於知識本體的語意檢索系統之研究-以學校公文及法規為例

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摘 要

目前學校機關的公文數量相當龐大，大多數的公文檢索系統仍然採用關鍵字比對方式，導致公文 需求者經常無法精確取得公文資料。本研究目的是運用知識本體概念，提出公文檢索系統的語意 分析機制，讓使用者可以正確取得符合需求的公文資料，有效提昇學校行政效率與知識件的管理。 本研究設計的檢索系統包括前置處理、公文知識本體、搜尋引擎等三部份。使用者藉由介面與 系統直接進行互動。知識本體是以檔案管理局制定的學校機關檔案分類表建置在Protege-2000 知識本體開發平台。搜尋引擎於公文知識本體中找出與檢索詞相同意義的詞彙，並且把檢索詞 轉換成同義詞所屬的分類號，取代使用者輸入的檢索詞，再以SQL語法對資料庫進行搜尋。 本研究建置的公文語意檢索系統，具體貢獻如下：⑴以知識本體為基礎的公文搜尋機制，使系統檢索層次從「字串搜尋」提昇到「語意搜尋」，因此公文需求者可以更精確的取得公文服務；⑵發文者於上傳公文時，輸入該份公文中具代表性的詞彙作為索引詞，可以提昇往後系統的查詢速度；⑶當公文跨越兩個以上類別時，除了原本的分類號，可以再賦予其他次分類號，以利找出跨類別的公文資料。本研究以實驗評估結果驗證所設計的系統架構有其合理性，確實能有效提昇公文檢索的準確度。

關鍵詞 : 知識本體、學校機關檔案分類表、檢索系統、語意搜尋、索引詞

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