

摘要

學術傳播是各學門領域研究人員傳遞學術資訊與研究成果的過程，藉由此過程的不斷循環、創新，人類知識也隨之逐步往前推進。傳統以正式學術出版為主的學術傳播體系，近年來由於期刊價格高漲與市場壟斷等問題，引發所謂學術傳播危機，因應而生的開放取用運動，則憑藉著電腦與網路科技發展，期待為學術傳播帶來新的發展面向，而其中電子預印本開放取用亦成為學術資訊傳播交流的重要選項之一。

電子預印本典藏庫收集學術論文作者主動上傳的電子預印本，以提供檢索與全文取用，形成電子環境下一種自由、開放的學術傳播模式。透過電子預印本典藏庫的運作，研究人員得以快速、廣泛地傳遞最新的資訊與研究結果。國外研究顯示電子預印本在網路時代學術傳播轉型中扮演著新的角色與功能，並因不同學門學術傳播的差異性，而有發展與利用程度的不同。物理學門則為其中的先驅與翹楚，因此本研究乃以物理學門為例，一方面從開放取用角度探討電子預印本在學術傳播轉變中的角色與功能，另一方面則藉由調查國內物理學門研究人員對電子預印本的認知與利用情形，以作為學術傳播相關研究、其他學門電子預印本或開放取用相關議題研究之參考。

研究結果顯示我國物理研究人員利用電子預印本典藏庫的歷史甚久、利用情形甚為普遍，發表、引用電子預印本的人數與篇數呈逐年穩定成長的情況，而在不同主題領域間亦有利用程度上的差異。電子預印本典藏庫增進學術傳播的速度與範圍，是一項革命性的發展，對我國物理研究人員的學術資訊傳播而言，具有相當程度的重要性。多數受訪者認為使用電子預印本典藏庫確實影響其使用正式出版期刊的情形，並有高達九成的受訪者同意使用電子預印本典藏庫確實改善其學術傳播方式。而電子預印本典藏庫對學術傳播的影響，不在於與傳統正式出版期刊的取代或消長，而在於促進學術資訊流通的速度與廣度、有助於弭平學術資訊落差以及平等、開放取用概念的充份落實。

Abstract

Scholarly communication is a process for researchers in different subject areas to spread research information and results. With continuous circulation of the information and innovation of the process, human knowledge then keeps progress. Recently, scholarly communication has been in serious crisis due to the highly increasing price of the periodical and the problem of market monopolization. Open Access is then developed and expected to bring constructive development for scholarly communication by taking advantage of computer and network technology. E-print archive also gives an important option for circulation and communication of academic information.

E-print archive provides the function of search and full-text access and forms a free and open mode of scholarly communication under electronic environment. Researchers can transmit newest research results rapidly and broadly. Several research results show that e-print archive plays a new role in evolution of scholarly communication. In addition, there is difference in development of e-print archives between different subject areas. The first and most popular e-print archive is constructed and used by physicists, and therefore physics is chose as an example in this research. The role and function of e-print, the recognition and utilization to e-print archives for physicists in Taiwan are investigated.

Research result shows that physicists in Taiwan have used e-print archive for a long time and in widespread. The number of e-print published and cited is steadily increasing year by year. However, there is difference in the utilization amount between different subject areas. E-print archive improves the speed and the scope of the scholarly communication and is a revolutionary development. Most interviewees agree that e-print archive really impacts the using rate of formal published journals. In addition, more than 90% interviewees agree that the e-print archive really improve the way of communication.