

Personal Development

Information technology provides important tools for the conduct of research and teaching, communication, administration, and personal productivity. Increasingly powerful computers allow one to solve complex problems and simulate natural phenomena, while networks provide access to scientific literature and data while facilitating communication and collaboration with colleagues. The impact of information technology on teaching can be equally profound, linking students and faculty through networks, allowing access to original materials, and supporting new forms of pedagogy such as distributed virtual environments. The array of tools for productivity—e-mail, wordprocessors, spreadsheets, contact managers, symbolic mathematical tools, presentation software, web browsers and search engines, data warehouses, and multimedia—continues to expand.

While it is clear that information technology has the capacity to both enhance and enrich the activities of the researcher, it is also clear that failing to keep pace with the rapid evolution of these tools can put one at considerable disadvantage. While it is not necessary to be an early adopter of each wave of new technology, some facility with mainstream technology such as the Net and personal productivity tools has become essential to keep pace with the scholarly community. Indeed, recent surveys suggest that many scholars increasingly worry that they are falling behind in their use of information technology, thereby running the risk of becoming isolated from their research colleagues and unable to take advantage of the emerging tools for teaching and scholarship necessary for the classroom and the laboratory.

Hence, it is important that institutions provide sufficient resources to enable their researchers to keep pace with rapid developments in information technology through robust technology environments, staff support, and training opportunities. Similarly it is essential that today's researcher make the personal commitment to take advantage of these opportunities, to keep pace with technology just as he or she attempts to keep pace with scientific advances in their fields.