

## **CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

The purpose of this research was to investigate the degree to which information communication technology (ICT) can be an effective mechanism for information delivery and professional support for teachers in South Africa. It also investigated the extent to which the Internet can be a vehicle for meeting the information needs of teachers.

The main research question of this study was how to establish a web-based information resource to meet the information needs of Afrikaans First Language teachers.

First of all, the literature review established that the Internet is an excellent tool for information delivery. Almost all kinds of information can be conveyed via the Internet. Researchers such as Jackson (2000), Girod & Cavanaugh (2001) and Quinlann (1997) are convinced of the web's potential to deliver essential information, especially to teachers. In countries where there are quality web-based resources, the Internet is well utilised as an information resource by teachers.

Teachers do not utilise web-based resources, mainly because of insufficient Internet access and a lack of training to integrate ICT skills in their teaching. This is also the case in South Africa and in particular with the target population of the study.

Jamie McKenzie (1999b) reminds us that many teachers are disillusioned by the Internet. Careful attention must be given to the training of teachers if the investments made in the development of web-based resources are to reap fruits. "Simply learning how to operate a computer and log onto the Internet is not sufficient; teachers need curriculum-integration training as well as basic skills training" (Sherry & Gibson 2000).

Although the policy environment in South Africa is conducive to the development of Internet resources, there is still a considerable lack of local content and content for specific subjects. There is a special need for quality resources with in-depth information for teachers and learners alike.

Quality sites need to adhere to specific design and implementation principles. The best sites are those that adhere to the specific information needs of the intended target group. This is especially important to ensure ownership and utilisation by the target population.

The study focused on Afrikaans First Language teachers, their information needs and their utilisation of information resources. The data analysis revealed that the target group's main information needs are for lesson ideas and help with exams and tests. The most utilised information resources are newspapers, magazines and textbooks, with the Internet almost in the last place.

The reasons why the Internet is not a well-utilised resource by the target group correlate strongly with international trends, ranging from low levels of Internet access to lack of skills and awareness of the Internet's possibilities and resources.

A subject-specific information resource for Afrikaans First Language teachers, the *Goudmyn*, was established according to the criteria and guidelines in the literature in this regard. An evaluation of the resource and feedback to the resource are positive and shows evidence of appreciation from the teachers. Requests for certain kinds of information have been received and a handful of teachers have submitted contributions to the resource. The visitor statistics of the resource show a steady increase in the visits to the resource during the past year.

Though the *Goudmyn* is still a small in scope, it manifests the potential to become an important information resource for Afrikaans language teachers. The further development and management of the resource should still be directed by ongoing research. The resource can benefit from a marketing campaign while workshops for the target group can lead to awareness and higher ICT skills amongst these teachers.

This study can serve as a pilot study for more in-depth research concerning the role of the Internet and information resources in the professional lives of South African teachers. More studies on the information needs of teachers of all the subjects should also be done in South Africa. This can play a vital role in giving direction to the development of learning support materials and information resources for teachers.

After completion of this study, it is the researchers' opinion that there are also broader issues that need to be addressed, such as:

**The urgent development of subject-specific portals for teachers of all learning areas/ subjects:**

- From the study it is clear that reliable and updated information resources for teachers are important for capacity building.
- Teachers are often looking for information, but do not know where to start. To ease the task of the teacher and save precious time, there should be subject specific portals in all the learning areas with links to relevant resources.
- To reduce efforts and cost it is important to consolidate efforts and to develop a central educational portal for teachers that not only addresses their information needs, but also provides a platform for discussion, debate and development of information resources and learning support material.

**ICT skills should be incorporated into all levels of preservice teacher training:**

- Inservice and preservice training of teachers should be more strongly aligned in terms of ICTs.
- There is still a misconception about IT skills (computer skills) and ICT skills. ICT skills entail, among others, the pedagogical use of technology in the classroom, information literacy, and collaborative learning via ICTs.
- Deliberate actions need to be taken to advocate the pedagogical use of ICT in the classroom.

**Departments of education should provide stronger leadership in the empowerment of teachers in ICT skills:**

- There is a need for a workable model of inservice training for teachers in the application of ICTs in teaching and learning in South Africa.
- Accredited inservice training programmes for teachers at different levels should be developed and introduced.
- Diverse inservice programmes for teachers addressing different competency levels, different needs and different ICT applications are necessary.
- Organised and available pedagogical support in ICT applications in all learning areas/ subjects must be provided.
- The establishment of teacher support groups to discuss, debate and develop subject specific content is advised.
- Acknowledgement of performance in ICTs by teachers to promote the use of ICTs will certainly motivate others to follow the same route.
- Subject-focused campaigns to advocate the pedagogical use of ICTs can be effected via workshops, campaigns, seminars and publications.

**Stronger collaboration between stakeholders:**

- Stakeholders like departments of education, universities, colleges and NGOs should collaborate to avoid duplication, for example, education

departments can provide the content, while tertiary institutions do the quality control and NGOs develop infrastructures and ensure capacity building.

- Examples of successful ICT projects should be shared and built upon.
- Teachers who are leaders in the field of innovative ICT applications in the classroom can act as mentors. Sherry and Gibson (2000) mention the role of these teachers-leaders to be more than only exemplary:

"They become active researchers who carefully observe their practice, collect data, share their improvements in practice with peers, and mentor new teachers through the learning/adoption process. They become change facilitators who help diffuse educational technology throughout the entire school system."

Girod and Cavanaugh (2001: 46) rightly state: "Technology is not the key to radical change – **teachers** are the key" [my emphasis].