

CHAPTER 4: RESEARCH FINDINGS

The research findings for this study will be presented in the same sequence the research process followed, namely the three different cycles described in chapter three (Figure 3.2):

1. Audit of resources
2. Analysis of information needs
3. Improvement and evaluation of resource

4.1 Cycle One: Audit of information resources for Afrikaans L1 teachers

In Cycle One the research tried to establish answers to the following questions:

- What information resources are available for Afrikaans language teachers?
- How do Afrikaans L1 teachers use and value these resources?
- Do Afrikaans L1 teachers utilise the Internet as information resources, and what are the contributing factors in this regard?

4.1.1 Information resources for Afrikaans L1 teachers

After a thorough search through libraries and catalogues, it is evident that Afrikaans language teachers have only one printed information resource. It is a journal called *Klasgids*, published three to four times a year. Issues consist mainly of contributions from teachers in the form of test papers, discussions of poetry or lesson ideas. Teachers or schools have to subscribe to the journal and running costs increase yearly.

Apart from this journal, Afrikaans L1 teachers have a variety of textbooks to choose from to assist them in teaching. *Koerant-in-Onderwys*, a supplement to the Afrikaans newspaper *Beeld*, gives lesson ideas and guidelines on how to integrate newspapers into classroom teaching.

A survey in 1999 of Internet resources revealed no formal resource dedicated to the information needs of Afrikaans language teachers. This was at a time when a difficult new curriculum was introduced and information communication technologies were proliferating. At that time it was established that there were no such initiatives of the kind on the Web.

At the end of 1999 the researcher started the *Goudmyn*, a small-scale web site with documents of the new curriculum translated from English and with links to Afrikaans web sites on the server of the then Onderwyskollege van Pretoria. The process of establishing an online information resource is a time consuming one. The web site grew slowly with lesson plans, more curriculum information and a few discussions of prescribed literature. Again it was necessary to make sure that the resource was not duplicating information and an audit of information resources for the intended target group on the Internet was done.

A thorough survey of South African education resources on the Internet was done from June to October 2001. Search engines such as Google, Altavista, Yahoo and Aardvark were used to search for resources dedicated to Afrikaans language teachers on any of the following web sites:

- South African educational resources
- Tertiary institutions
- NGOs
- South African Internet Service providers
- Afrikaans resources

Table 4.1 indicates the available educational resources for South African teachers found on the Internet in 2001. The last column indicates the status quo of information for Afrikaans language teachers on the resource (Addendum D provides a detailed description of the resources and the date the resource was accessed).

Table 4.1: An index of web-based information resources for teachers in South Africa (2001)

URL	INSTITUTION	AFRIKAANS
http://education.pwv.gov.za	National Department of Education	<i>None</i>
http://education.pwv.gov.za/teli2	National Centre for Educational Technology and Distance Education	<i>None</i>

www.wcape.school.za	The Western Cape Schools Network (WCSN)	None There is a section for Afrikaans First and Second Language, but without any information
http://scope.ncape.gov.za	Scope: South African- Finnish Co-operation in the Education Sector	None
www.school.za	SchoolNet SA	None
www.saide.org.za	The South African Institute for Distance Education (SAIDE)	None
www.shoma.org.za	The ShoMa Education Foundation	None
www.teacher.co.za/edutech	Edutech Puisano	None
www.learn.co.za	Learning Channel Campus	None Subject support in Afrikaans for other subjects e.g. Mathematics, Biology, and Geography.
www.sabceducation.com	SABC's Education Network	None
www.mweb.co.za/learning	M-Web's Learning Channel	Yes Only available to subscribers and in school hours from a LAN.
www.mweb.co.za/LitNet	M-Web's OnderwysNet	Yes Only available to subscribers.
www.easymaths.org	Easymaths – private initiative of Maggie Verster	None
www.nkp.ac.za/afrikaans ¹ (Die Goudmyn)	Previously known as the Onderwyskollege Pretoria – since 2002 the School for Teacher Training of the University of Pretoria	Yes

¹ The URL for the *Goudmyn* has changed in 2002 to www.onnet.up.ac.za

Thus, in 1999, except for the *Goudmyn*, only *M-Web* had an infrastructure for learners and teachers of Afrikaans L1 teachers on the Internet. *M-Web's Learning Channel* and *OnderwysNet* support learners and teachers of Afrikaans, but their service is only available for *M-Web* subscribers and from a LAN during school hours. As many schools still use dial-up facilities for Internet connectivity, these resources are not to the benefit of all teachers. It still leaves a huge section of the Afrikaans teaching-population without online support.

There are many general Afrikaans resources on the Internet in Afrikaans. *Die Knoop* (www.dieknoop.co.za) is the largest single collection of links to all Afrikaans web sites. *Storiwerf* (www.storiwerf.co.za) is a site dedicated to Afrikaans children's literature. But only *M-Web* and the *Goudmyn* offer information specifically for Afrikaans language teachers. The *Goudmyn* is the only free information resource for these teachers.

The survey of web-based information resources led to the conclusion that there is definitely a lack of resources and content for Afrikaans language teachers on the Internet. There are also not many other paper-based resources for this professional group. It is evident from the search for information resources that there is still scope for contributions in this regard. A dedicated web-based information resource for this target group has the potential to provide relevant information for Afrikaans language Teachers.

4.1.2 Afrikaans L1 teachers' utilisation of information resources

To find out to what extent Afrikaans L1 teachers value and use information resources, a survey was conducted at a seminar for Afrikaans language teachers at the University of Pretoria (September 2000). A questionnaire was completed by 78 Afrikaans L1 teachers.

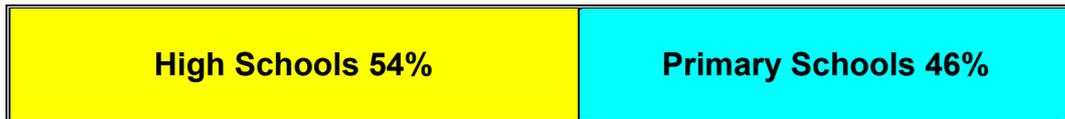
4.1.2.1 Profile of the participants

The teachers who participated in the research represented primary and high schools in urban and rural areas from Gauteng and a few other provinces. The next section gives a profile of the participants.

□ **Type of school**

The respondents represented both primary schools and secondary schools (also known as high schools):

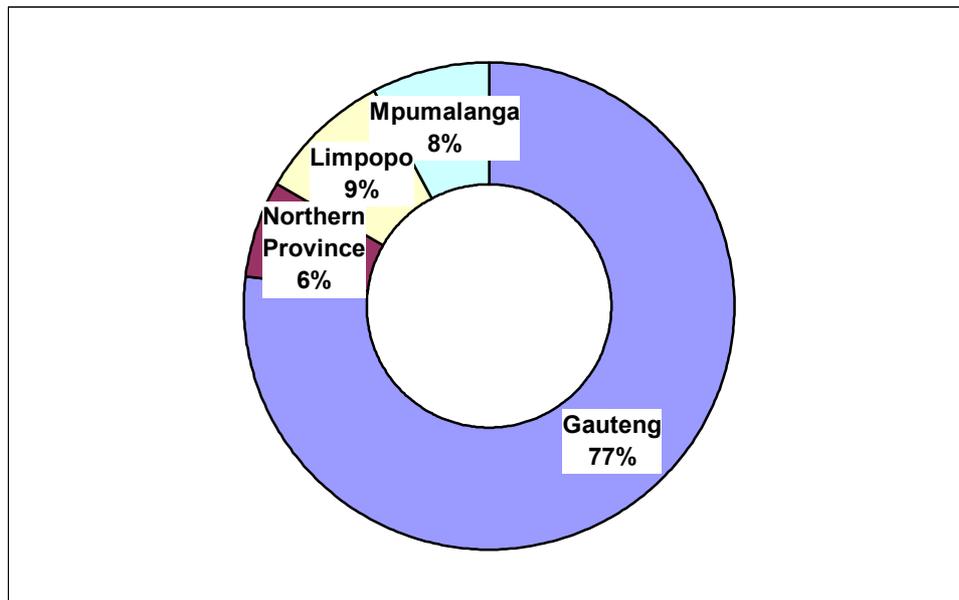
Figure 4.1: Type of school



□ **Geographical location of schools represented by respondents**

Schools were also identified according to their geographical location (Figure 4.2). This classification identifies the provinces represented by the respondents.

Figure 4.2: Geographical location of schools

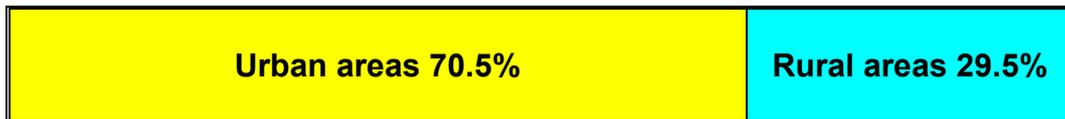


The fact that the conference was held in Pretoria resulted in an attendance of largely teachers from Gauteng (76.9%). The results from the study cannot be representative of teachers from other provinces.

□ **Distribution of schools**

Figure 4.3 shows that the respondents were mainly teachers from schools in urban areas. This may be due to the fact that the conference was held in the city and more local teachers were able to attend the conference.

Figure 4.3: Distribution of schools



□ **Years experience in teaching Afrikaans First Language**

As many as 57.9 % of the respondents indicated that they have always taught Afrikaans First language, compared to 42.1 % respondents who have not taught Afrikaans L1 previously.

For the purposes of this study the only significant variable was **the type of school** – the only significant differences in the data were between primary and high school teachers of Afrikaans L1. The distribution of schools or the geographical location of schools did not seem to have any impact on the data, neither did the experience of teachers

4.1.2.2 Utilisation of information resources by the respondents:

The teachers were asked to indicate how often they use different sources of information when preparing for lessons. '**Regularly**' refers to information resources used weekly or at least monthly (Table 4.2).

Newspapers and popular family magazines are the most highly utilised information resources for Afrikaans L1 teachers. Various newspaper groups have contributed to the training of teachers by integrating material from newspapers into the classrooms (*Beeld, Burger, Sunday Times*).

Table 4.2: Utilisation of information resources

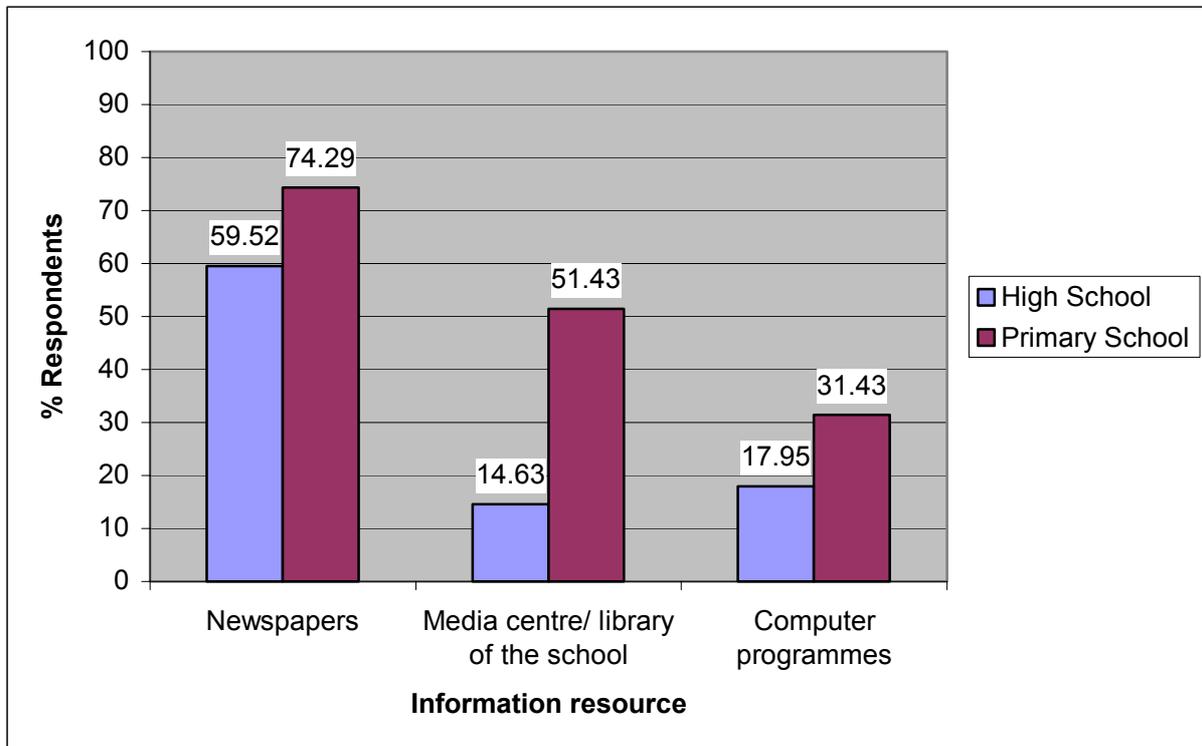
Information Resource	Regularly
1. Newspapers	90.9%
2. Popular magazines (<i>Huisgenoot, Sarie etc.</i>)	85.7%
3. Text books	81.1%
4. Subject journal (<i>Klasgids</i>)	64.5%
5. School library	56.6%
6. Material from workshops	54.1%
7. Radio	47.9%
8. Television	47.3%
9. Encyclopaedias	45.9%
10. <i>Insig</i> - magazine	41.7%
11. Computer programmes	40.5%
12. Community library	33.8%
13. <i>De Kat</i> - magazine	27.8%
14. Internet	22.9%
15. Subject advisor	13.5%
16. E-mail	12.7%
17. Seminars & conferences	5.5%

It is interesting that popular magazines are used more frequently than textbooks. Due to the changes in the curriculum, teachers are less textbook-bound. Magazines that are apparently not as popular are the two more upmarket or intellectual Afrikaans magazines, *De Kat* and *Insig*. The majority of the teachers (64.5%) use the journal *Klasgids* regularly, which indicates that Afrikaans L1 teachers do find this journal valuable. Note that subject advisors, the Internet, e-mail, conferences and seminars do not seem to be highly utilised sources of information for Afrikaans L1 teachers.

There are not many significant differences between the utilisation of information resources by primary and high school teachers. The only resources where significant differences were evident are represented in Figure 4.4. These include

newspapers, the school library and computer programmes. The other information resources are utilised more or less equally.

Figure 4.4: Differences between primary and high school teachers in the utilisation of some information resources



4.1.3 Afrikaans L1 teachers' utilisation of the Internet as an information resource

Compared to the high levels of Internet use by teachers in developed first world countries (Chapter 2) this study reveals very low levels of Internet use by the target group. Table 4.2 indicates that only **22.9%** of the respondents use the Internet and **12.7%** use e-mail on a regular basis as an information resource.

The low level of Internet use by Afrikaans language teachers supports Stefanie Hefer's words quoted in Chapter 2.3.4.1. Teachers in South Africa are not yet 'online'. If one plans to introduce an active needs-driven information resource on the Internet the following should be considered:

- i) What are the reasons for the low level of utilisation of the Internet?
- ii) What are the teachers' attitudes towards the Internet?

- iii) What factors contribute to the use of the Internet?
- iv) For what purposes do the target population use the Internet?

4.1.3.1 Reasons for low levels of Internet utilisation by Afrikaans L1 teachers

A review of literature on the topic indicates that a lack of time, equipment, support, training and content contribute to low levels of Internet use by teachers (Chapter 2.3.4.4). Summerley (1996) and Czerniewicz, Murray & Probyn (2000) identified the same factors as the reasons why South African teachers do not utilise the Internet. It is now time to identify why Afrikaans L1 teachers under-utilise the Internet.

The data from the questionnaires revealed inadequate access to the Internet, a lack of awareness, ICT skills (training) and support as possible reasons for the low level of Internet utilisation by Afrikaans L1 teachers.

□ Access

Of all the respondents only 28.6% indicated that they have Internet access at home. Becker (1999) averred that the presence of technologies increases utilisation. Of the respondents 74% indicated that they have access to the Internet at their schools. One would expect the Internet use to be much higher with these levels of connectivity.

Informal discussions with Afrikaans L1 teachers, however, revealed that connectivity in these cases refer to only **one** connected computer for the use of all the teachers. Teachers mentioned that these connected computers were often in the principal's office, or that their full schedules do not allow them the luxury of browsing the Internet for quality information. One can thus add that **a lack of time** also constrains teachers from utilising the Internet.

Another question regarding access to the Internet is affordability. Computers and modems are expensive and in South Africa telecommunication is not cheap. In her response to an e-mail, Stefanie Hefer (2002) of M-Web Learning, voices the frustration of Afrikaans teachers and confirms the above-mentioned findings:

Affordability plays a role, but the biggest reason is overwork, anxiety because of constant changes and the meddling with teaching methods which have always been OK, the misconception that they do not have enough time and that the Internet will interfere with what little time they have².

□ Attitudes

Even though it seems that Afrikaans language teachers are not yet utilising the Internet as an information resource, they are positive about the idea. Of the seventy-eight respondents 94.9% expressed the view that there is a need for ICT integration into the Afrikaans curriculum and 94.8% indicated support for future training to learn more about the Internet and its possibilities. An overwhelming 80.5% indicated that they would like to have a subject-specific web site for Afrikaans L1 teachers.

The respondents were asked what information they perceive the Internet could offer the Afrikaans L1 teacher. Table 4.3 presents their feedback in this regard:

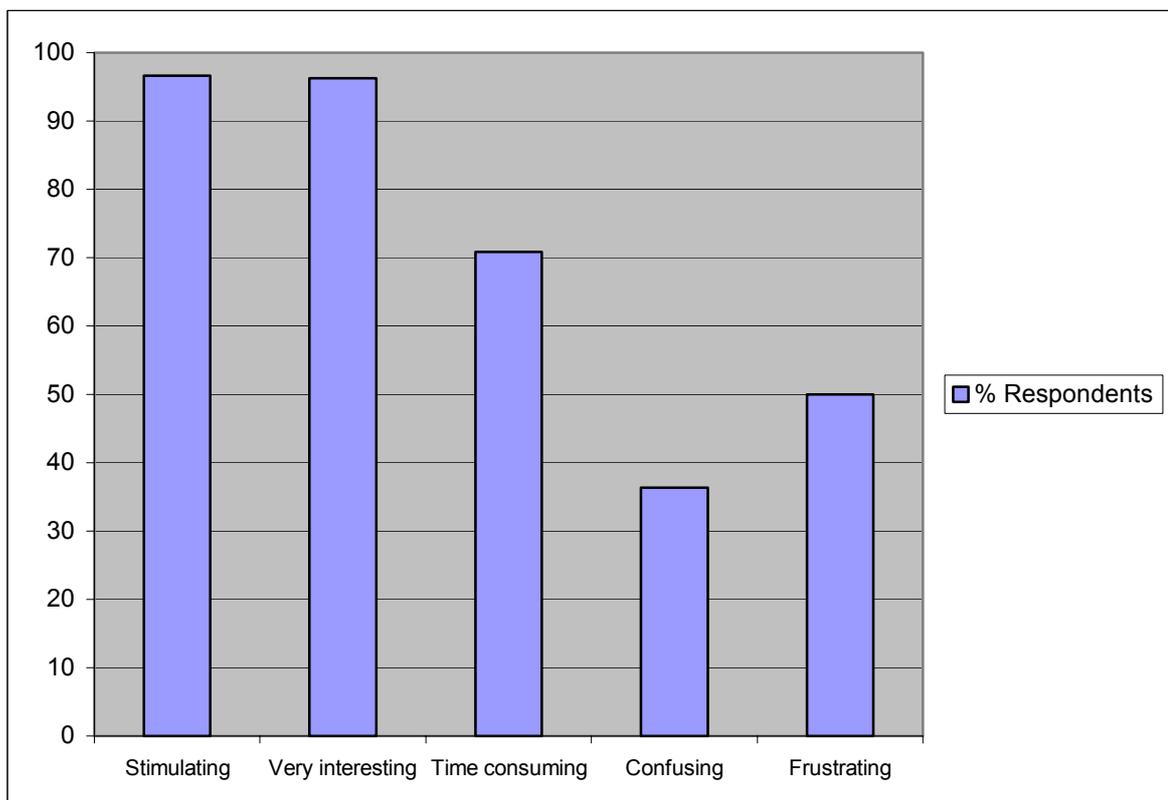
Table 4.3: Information the respondents feel the Internet should provide

Information the Internet should provide	% Respondents
Curriculum matters (OBE)	80
Information on new textbooks	76.9
Lesson ideas	76
Reviews of new books	73.1
Lesson plans	72
Exams and tests	70.4
Prescribed texts	70
Public speaking/ debate	64
Contemporary language issues	62.5
Afrikaans authors	59.1
Information on competitions	56.5

² Translated from the Afrikaans: *Die bekostigbaarheid speel wel 'n rol, maar die grootste oorsaak is oorwerktheid, angs vir verandering en die gepeuter aan onderrigmetodes wat dan nog altyd OK was, die wanindruk dat hulle dan juis te min tyd het, en dat die Internet op die min tyd gaan inbreuk maak.*

The respondents clearly have high expectations of the Internet as an information resource. In general the respondents' descriptions of the Internet were very positive (Figure 4.5), but they also indicated that they find the Internet time-consuming and frustrating. One factor that frustrates users is that some web pages take very long to download.

Figure 4.5: Respondents' descriptions of the Internet



It can thus be concluded that the respondents do not have negative attitudes towards the Internet, and that negative attitudes are not a reason for the low level of Internet use by the respondents.

□ **Awareness**

Of the respondents who were asked whether they thought that there was enough Afrikaans information on the Internet, 5.1% agreed that there was, while 30.8% disagreed and 64.1% indicated that they do not know.

Their reaction contributes to the hypothesis that the Internet is not being utilised because teachers are either not aware of the information for them on the Internet, or that there really is a lack of good content. Although there is information available on the Internet for Afrikaans L1 teachers, it is inadequate.

□ **Skills/ Training**

ICT skills were not an integral part of pre-service teacher training a few years ago. Only 9% of the seventy-eight respondents indicated that they had formal training in the use and working of the Internet and only 6.4% had formal training in the use of e-mail. Concern has been raised on the lack of teacher development in this regard. It seems that Departments of Education have never targeted in-service Afrikaans L1 teachers as potential users of web-based resources. This might also be the case with teachers of other subjects.

Only 46.2% of the respondents have an e-mail address (most probably at their schools), while 32% of the respondents indicated that they do not know how to use the Internet and e-mail.

From Table 4.4 it can be seen that there is a lack of formal training opportunities in ICT skills for Afrikaans language teachers. The majority of the respondents indicated that they were either self-taught or given training by friends or family members.

Table 4.4: Sources of training in ICT skills

Internet training through:	Respondents
Personal effort	16
Friends/ family	14
Colleagues	3
Group work at school	2
Learners	2
Post-graduate studies	1
Diploma/ certificate courses	1
Workshops at school	1
Workshops at Education Dept.	1

Private courses	1
Pre-service studies	nobody

The fact that there is a definite lack of training opportunities for Afrikaans L1 teachers is an unmistakable reason why the target group does not utilise web based information resources.

□ Support

Table 4.5 shows that 65% of the respondents indicated that they do have help with the effective utilisation of the Internet.

Table 4.5: Support available

Who can help	Respondents
Family/ friends	17
Colleagues	11
Group work at school	2
Learners	3
Online help	1

The main reasons for Afrikaans L1 teachers not utilising the Internet are a lack of time, formal training and the skills to integrate ICT into the current curriculum as well as a lack of resources and a lack of awareness of resources available. This correlates with the international trends in the sources consulted, yet Afrikaans L1 teachers also add **a lack of awareness** of web-based resources to this list. Perhaps they think that the Internet is dominated by English and therefore cannot serve their information needs.

These are important considerations to take into account for the future development of the *Goudmyn*. The initial goal of the web site was primarily to serve as a single platform from which Afrikaans language teachers can access relevant information. These teachers urgently need training in the use and integration of ICT into the Afrikaans syllabus. The content on the resource must be expanded to cover more

aspects of the curriculum and their information needs. Furthermore, it is evident that a resource should be marketed effectively to enhance awareness amongst teachers.

It was, nevertheless, necessary to make sure that the resource really addresses the information needs of the intended target population. This leads to the second cycle of the research – that of identifying the information needs of Afrikaans language teachers.

4.2 Cycle Two: The information needs of Afrikaans L1 teachers

The pertinent questions asked at this stage of the research were:

- What are the information needs of Afrikaans L1 teachers?
- Are there any significant differences in the information needs of primary and high schools teachers?

4.2.1 Information needs of Afrikaans L1 teachers

Chapter 2.3.1 dealt with the information needed in general, as well as with research results concerning the information needs of language teachers. Top of the list are content-area curriculum, pedagogical knowledge and further issues related to literature and language teaching. High on the list of information teachers indicated they would like to have, are promising practices and learning activities, or lesson plans. This section investigates how Afrikaans L1 teachers rate their information needs.

The focus groups generated data on what Afrikaans language teachers would like to see on a web-based information resource. In smaller discussion groups the teachers brainstormed lists of information they would like to have easy access to. During the feedback session it became evident that most of the teachers voiced the same needs. The analysed data of their feedback is presented in Table 4.6.

From the focus group discussions it is evident that Afrikaans L1 teachers need a wide variety of information. Classroom-related activities and assessment practices top the list, but are followed closely by the demands placed on them by their extra-mural responsibilities.

Table 4.6: Information needs of Afrikaans First Language teachers

Classroom teaching:	Examples of OBE lesson plans Prescribed poems (correct versions!) and discussions Tips for grammar teaching Themes for creative writing Reading lists, especially children's literature Crossword puzzles Humorous texts that could be used in the classrooms Prescribed poems set to music
Assessment strategies	Examples of assessment reports Exam papers Tests and memos
Extra mural activities	Information on competitions for learners Themes for speech festivals Suitable plays Publications of learner's own poetry
Professional development	Index of articles in <i>Klasgids</i> A calendar of events Introductions and reviews of new textbooks News on the latest developments in Afrikaans literature Jobs for teachers

4.2.2 The importance of information for Afrikaans L1 teachers

In addition to the focus group discussions, the teachers also completed a questionnaire that probed their information needs. Question 11 in the questionnaire asked the respondents to rate the importance of certain types of information according to a scale (1 = very important; 2= less important; 0 = not important).

Table 4.7 indicates how many of the respondents rated the importance of information on certain issues as **very important**.

Table 4.7: Importance of information

Importance of Information	%
1. Lesson ideas	85.5
2. Lesson plans	84.2
3. New textbooks	81.6
4. Exams and tests	78.9
5. Prescribed work	78.9
6. Outcomes Based Education	74.7
7. School publications	66.7
8. Contemporary language issues	64.5
9. Reviews of new books	64.5
10. Debate and public speaking	56.6
11. Afrikaans authors	45.9
12. School competitions	41.7

The rating of the importance of information by the respondents turned out to be very significant. According to the results, the respondents feel a dire need for ideas for the classroom (This was supported by the findings from the focus group discussions). This could entail new, creative ways of teaching. Teachers teach the same concepts year after year. They do not always have the time or inspiration to think up new ideas.

Second to new ideas, are lesson plans (84.2%). This makes sense when one considers that teachers are facing a new teaching paradigm. At the time of the survey (2000), they were confronted with the introduction of a new curriculum. They need examples of how to implement the curriculum guidelines into classroom practice. Lesson plans would also alleviate their workload, especially if they are in a ready-to-implement format.

The lowest rating was for information on competitions, like the Afrikaans Ekspo and Olympiad (41.7%). Nevertheless, it is clear that this group of professionals rate information very high, and they need a wide variety of information to fulfil their professional duties.

The data from the questionnaire complements the data gathered during the focus group discussions. Similarities in the respondents' feedback indicate that there is a definite need for information on:

- Lesson plans
- Outcomes Based Education
- Exam papers and tests
- New textbooks
- Information regarding Afrikaans literature
- Competitions for learners

The findings of this study compares well with the findings from the literature on the subject. The data revealed that classroom practice (lesson ideas, assessment, pedagogy), curriculum matters (OBE, content-area guidelines) and learning support materials (background materials, games, worksheets) are very important for teachers in general. To what extent is this also the case with primary and high school teachers of Afrikaans?

4.2.3 Differences between the information needs of primary and high school teachers

It is further very interesting to note the difference in the rating of information needs between primary and high school teachers (Table 4.8 and Figure 4.6). Primary school teachers rated their need for information as a rule higher than those of high school teachers.

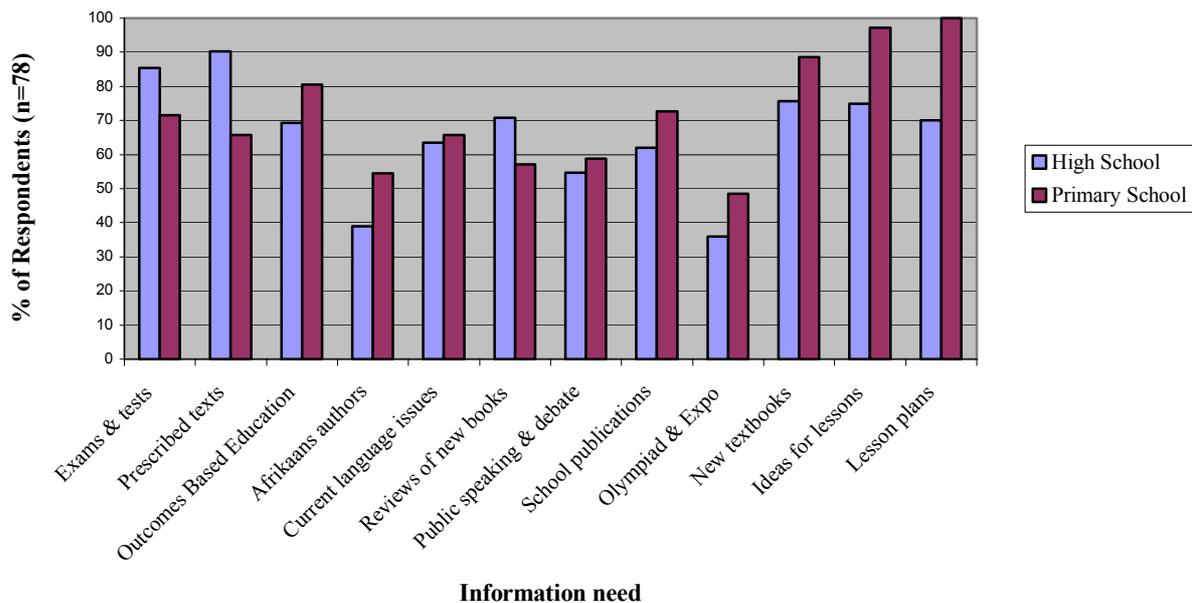
Exceptions to this are the greater need by high school teachers for information on exams and tests, prescribed texts and reviews of books. As high school teachers (especially those who teach the higher grades) feel the pressure of good exam results in the Matric final exams, it is to be expected that they rate information on exams very highly.

Table 4.8: Differences between the information needs of primary and high school teachers

Importance of Information	High School	Primary School	*P-value
Exams and tests	85.37	71.48	0.143
Prescribed texts	90.24	65.71	0.002
Outcomes Based Education	69.23	80.56	0.460
Afrikaans authors	39.02	54.55	0.407
Current language issues	63.41	65.71	0.900
Reviews of new books	70.73	57.14	0.327
Public speaking and debate	54.76	58.82	0.916
School publications	61.90	72.73	0.251
Olympiad and Expo	35.90	48.48	0.515
New textbooks	75.61	88.57	0.343
Ideas for lessons	75.00	97.22	0.021
Lesson plans	70.00	100.00	0.002

(*Where the P-value is less than 0.05, the data is statistically significant)

Figure 4.6: Differences between the information needs of high and primary school teachers



The differences between the information needs of primary and high school teachers can largely be accounted for by the difference in the focus and general goals of teaching Afrikaans L1. In the Intermediate (grades 4 – 6) and Senior Phases (grades 7 – 9) the learners are guided towards effective communication skills (reading, writing, listening and speaking). The teachers want new ideas, and are not that driven towards results in exams like the high school teachers, whose main information need is for examples of exam papers and tests and discussions of the prescribed literature texts.

With this information in mind the web-based resource for Afrikaans language teachers, the *Goudmyn*, was developed and expanded. The next phase was to ensure not only a quality information resource, but also that the resource would be utilised and valued by the intended target population.

4.3 Cycle Three: Evaluation of the web-based information resource for Afrikaans L1 teachers

In the process of evaluating the *Goudmyn* the following questions were asked:

- Does the information resource comply with the criteria of quality web-based information resources?
- To what extent do teachers use and value the information resource?

4.3.1 Evaluation of the *Goudmyn*

For the purposes of this research it was decided to use primarily feedback from the users of the *Goudmyn* to evaluate its appropriateness, user-friendliness, content and quality. Three features were added to the homepage of the *Goudmyn* to provide opportunities for this: an online evaluation form, a hyperlink to the e-mail address of the webmaster and a hit counter.

4.3.1.1 Online evaluation form

An online evaluation form on the site (Addendum C) enables visitors to the site to evaluate the online information resource for Afrikaans language teachers. Although the evaluation form was added to the web site early in 2001, only three responses had been received via this method by October 2002. Because of the extremely low

response rate, this means of evaluation does not bear much significance to the research. Table 4.9 nevertheless gives an indication of feedback received through this means.

All three respondents indicated that they are Afrikaans language teachers. Respondent one (R1) is a primary school teacher in a rural area, and respondents two and three (R2 & R3) are from high schools, with R2 from a high school in a rural area, while R3 is at a school in an urban area.

Table 4.9: Evaluation via the online evaluation form

	R1	R2	R3
1. The navigation in the site is easy	Y*	Y	Y
2. The resource contains relevant information	Y	Y	Y
3. The information is of good quality	Y	Y	Y
4. The resource is visually attractive	Y	N	Y
5. The information is inadequate	Y	N	N
6. More practical information is necessary	Y	Y	Y
7. I got useful ideas on the site	Y	Y	Y
8. I will tell others of this site	Y	Y	Y
9. It is worth the effort to visit this site	Y	Y	Y
10. I would like to participate in this project	Y	Y	Y

(*Y = Yes; N = No)

On the whole the evaluation of the site by end users is very positive. The only weak points that were identified relate to volume of content (R1:5) and visual appearance of the site (R2:4). Since this specific feedback, the design has been changed and the content is being upgraded and added to on a regular basis.

All three respondents felt that the site is worth visiting, that they will tell others of the project and that they would like to participate in the project. The three respondents also gave the following feedback:

R1 Primary School: *Thank you for all your effort. The web site is important, especially to us teachers in rural areas.*³

R2 High School: *We are very grateful for this web site – especially those of us that had to struggle through OBE for the first time this year. We are looking for practical advice regarding assessment and the dear old portfolio.*⁴

R3 High School: *Great idea – please don't stop! Thank you.*⁵

In principal the teachers indicated gratitude for the resource and mentioned the following factors that intensify their need for information:

- Being in a rural area
- The new curriculum
- Ideas for assessment
- Portfolio-assessment

The feedback of these respondents is in line with feedback received through e-mail.

4.3.1.2 Feedback via e-mail

All correspondence to the webmaster of the *Goudmyn* via e-mail was printed and stored. This serves as a valuable source of feedback from the users of the resource. Table 4.10 presents the feedback received through e-mail. Only e-mails that really expressed information needs or gratitude are documented here. The e-mails are numbered (E1 to E9) to protect the privacy of the senders.

The feedback received shows that especially teachers from rural areas express gratitude for the initiative. It is also interesting that South African teachers abroad also make use of the resource. Information needs mentioned in the feedback are ideas for art festivals, information on prescribed literature (especially for the Matric

³ Dankie vir die moeite. Die webruimte is belangrik, veral vir ons onderwysers op die platteland.

⁴ Ons ouens wat hierdie jaar die eerste keer meet oublee in graad 9 moes worstel is baie dankbaar vir hierdie webblad. Ons soek praktiese raad rondom assessering en die lieve ou portfolio.

⁵ Oulike idee – moet asb nie hiermee stop nie! Dankie.

syllabus) and Afrikaans authors and the new curriculum. Otherwise much appreciation for the content of the resource is evident from the feedback.

Table 4.10: Feedback to the Goudmyn

E1	Thank you for a nice web site! I usually search for hours for information on prescribed literature. Don't forget the teachers in the rural areas! I'm also looking for information on Curriculum 2005. ⁶
E2	Can you please help me with appropriate texts for gr 5-7 & gr 8-10 for arts festivals? ⁷
E3	I'm looking for information on Dalene Matthee's <i>Circles in a Forest</i> , but I can't find any. ⁸
E4	Here Rina asks for information on Afrikaans authors for her students in Afrikaans Literature at the University of Vienna.
E5	What a fantastic experience! It gave me hope again. Thank you for your effort, especially with the information on OBE, the new curriculum, etc. ⁹
E6	I do agree that your web site is indeed a gold mine. ¹⁰
E7	Help, please! I'm looking for prescribed texts for Matric 2003 ¹¹
E8	Just discovered your web site en had hours of fun! My colleagues enjoyed it as well. Thanks for the effort. I will visit this site often! ¹²
E9	How about contributions from abroad? I used "dieknoop", saw your link and browsed your site. My husband and I teach in England and I'm sure there are more teachers from all over who can contribute? ¹³

⁶ Dankie vir 'n wonderlike webruimte! Ek soek gewoonlik ure lank na inligting oor voorgeskrewe tekste. Moenie ons onderwysers op die platteland vergeet nie! Ek is ook op soek na inligting oor Kurrikulum 2005.

⁷ Kan u my dalk help met "stukke" vir kunstefeesdoeleindes. Gr 5-7 en gr 8-10. Ek moet leerders inskryf en afrig maar die stukke in ons omgewing is al so 'n bietjie holrug gery.

⁸ Ek is op soek na inligting oor Dalene Matthee se boek "Kringe in 'n bos" en oor Dalene Matthee self, maar ek vind nêrens inligting nie.

⁹ Wat 'n fantastiese ervaring! Ek het sommer weer hoop geskep. Dankie vir jou moeite, veral met goed oor UGO, die nuwe kurrikulum ens.

¹⁰ Ek stem saam dat julle webwerf 'n goudmyn is.

¹¹ Help asb. Ek soek voorgeskrewe werk vir matriek 2003.

¹² Het pas u webwerf ontdek en het ure se pret gehad! My kollegas het dit net soveel geniet. Dankie vir die moeite. Ek sal die werf beslis nog baie besoek!

¹³ Wat van bydraes deur onnies in die buiteland? Ek het toevallig op "dieknoop" ingegaan en toe gesien dat julle ge"link" is en gaan toer op die webbladsy. Ek en my man hou hier skool in Engeland en ek is seker daar is stringe ander in ander dele of lande wat ook 'n 'eier' kan lê?

4.3.1.3 Peer review

Once the *Goudmyn* was established, the next step in the evaluation process was to revisit the initial guidelines for web site development and evaluate whether the *Goudmyn* complies with these criteria (Table 2.2). The criteria of Table 2.2 were adapted into an evaluation checklist to be used as an instrument to evaluate the web site.

Professor Thinus Kühn, a colleague with 22 years experience of training Afrikaans language teachers at the University of Pretoria, was asked to evaluate the *Goudmyn* according to the checklist. He did the evaluation on 25 October 2002. His feedback is presented in Table 4.11.

Table 4.11: Peer review report

Aspect	Comments
Site access and usability <ul style="list-style-type: none">▪ Permanent, easy URL▪ Reliable server▪ Download time▪ Distinctive name▪ Screen appearance▪ Compatible with different browsers	<ul style="list-style-type: none">▪ Yes▪ University of Pretoria – yes▪ Quick▪ <i>Die Goudmyn</i> – yes▪ Clear and user-friendly▪ Not tested
Resource identification and documentation <ul style="list-style-type: none">▪ Target audience is mentioned▪ Mission, purpose and scope is clear▪ Documents are regularly updated▪ All documents have clear URLs	<ul style="list-style-type: none">▪ Yes▪ Yes▪ Yes▪ Yes

<p>Author identification</p> <ul style="list-style-type: none"> ▪ Name, qualifications, position and contact details of author(s) ▪ Recognised authority on the subject ▪ Involvement of an educational institution related to the topic 	<ul style="list-style-type: none"> ▪ Add more clearly ▪ Define more clearly ▪ Add Faculty of Education
<p>Information structure and design</p> <ul style="list-style-type: none"> ▪ Titles of documents are clear and descriptive ▪ Content fits the stated scope, purpose and audience 	<ul style="list-style-type: none"> ▪ Yes ▪ Yes
<p>Relevance and scope of content</p> <ul style="list-style-type: none"> ▪ Related to intended user's needs ▪ Currency ▪ Content meets curriculum standards of the country ▪ Documents provide new information on the topic 	<ul style="list-style-type: none"> ▪ Yes ▪ Yes ▪ Yes ▪ Very useful content
<p>Validity, accuracy of the content</p> <ul style="list-style-type: none"> ▪ Bibliographies to confirm accuracy of information ▪ Documents are free of errors or misleading omissions ▪ Language and grammar correct and appropriate ▪ Information of consistent quality 	<ul style="list-style-type: none"> ▪ Where applicable ▪ Yes ▪ Edit all pages ▪ Yes
<p>Navigation within the document</p> <ul style="list-style-type: none"> ▪ Index/table of contents to navigate within the document ▪ Link back to home page ▪ Help 	<ul style="list-style-type: none"> ▪ Move to top of page and add link to top of page ▪ Yes ▪ No
<p>Quality of the links</p> <ul style="list-style-type: none"> ▪ Links are clearly visible and understandable ▪ Instructions appear before links ▪ Information on links ▪ Links are reliable, relevant and appropriate ▪ Minimum mouse clicks 	<ul style="list-style-type: none"> ▪ Do not underline headings in documents if they are not hyperlinks ▪ Yes

<p>Aesthetic and affective aspects</p> <ul style="list-style-type: none"> ▪ Accepted graphic design principles (e.g. balance, unity, proportion, simplicity) ▪ Accepted text design principles (headers, limited mix of style and sizes) ▪ Readability and legibility (sufficient colour and tone contrast, font size) ▪ Evidence of originality and creativity in visual design and layout ▪ Source attracts and holds the user's attention 	<ul style="list-style-type: none"> ▪ Tables occasionally use space that could be used for more important information ▪ Change upper case to lower case; fonts could be smaller ▪ A very promising web page!
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The peer review of the *Goudmyn* was favourable. The main concern is still editing – some pages need language and grammar editing. Consistency regarding the use of upper and lower case should apply on all pages. Headings must not be underlined if they are not hyperlinked. Tables should be avoided as they take up too much space. The most important change the resource needs has to do with the use of the menu. At this stage it is at the bottom of each page, but it should be moved to the top. A link to the top of a page must be also be added to all pages. This change will enhance the navigation in the resource.

The content of the resource was evaluated positively. The content was rated as of high quality and good variety, current, related to the target group's needs and, therefore, very useful. It will add to the credibility of the resource to add more information on person(s) and/or department responsible for the resource.

Otherwise the *Goudmyn* complies with the criteria of quality web-based information resources. The feedback from the peer review is being incorporated into the design and content of the *Goudmyn*. These changes will benefit the resource and its end-users. If the content is of good quality, the users will be likely to return for more (as E-mail 8 indicated). This raises the issue of the utilisation of this web-based information resource.

4.3.2 Utilisation of the information resource

To keep track of the number of visitors to the *Goudmyn*, a hit counter from *Absolute Statistics* was added to the home page during June 2000. Absol Stats renders a free service for non-profit web sites to keep detailed statistics of visits to the web page. Since the existence of the server on which the *Goudmyn* was run, was terminated in March 2002, Absol Stat's data indicates only hits from June 2000 to March 2002. The number of hits amounted to 2511, with the average score of 150 per month and an average of four visits per day to the *Goudmyn* (Figures 4.7 and 4.8).

Figure 4.7: Visitors to the *Goudmyn* in Year One: Aug 2000 - Jul 2001

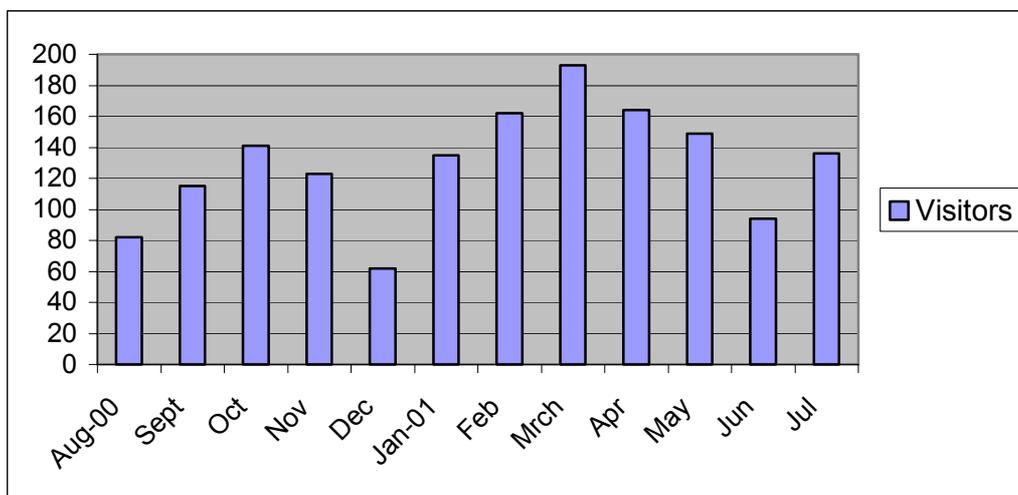
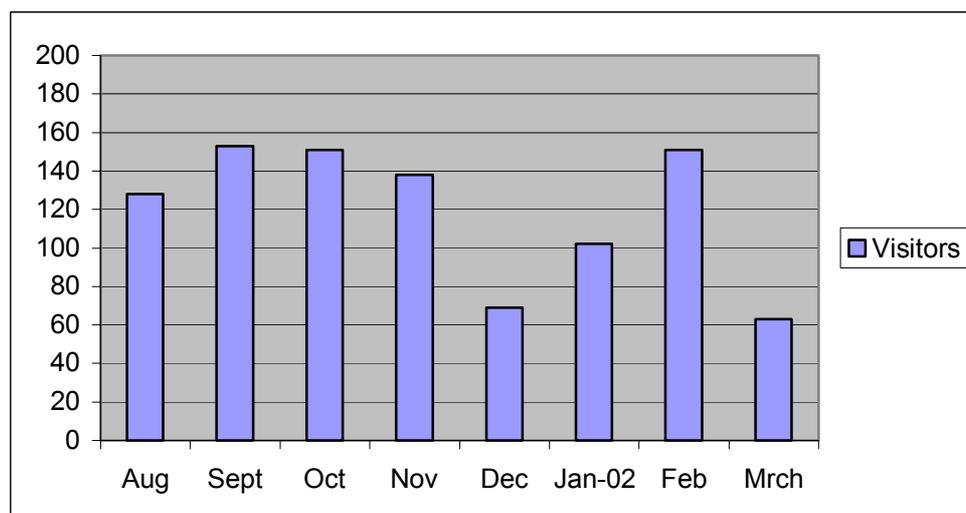
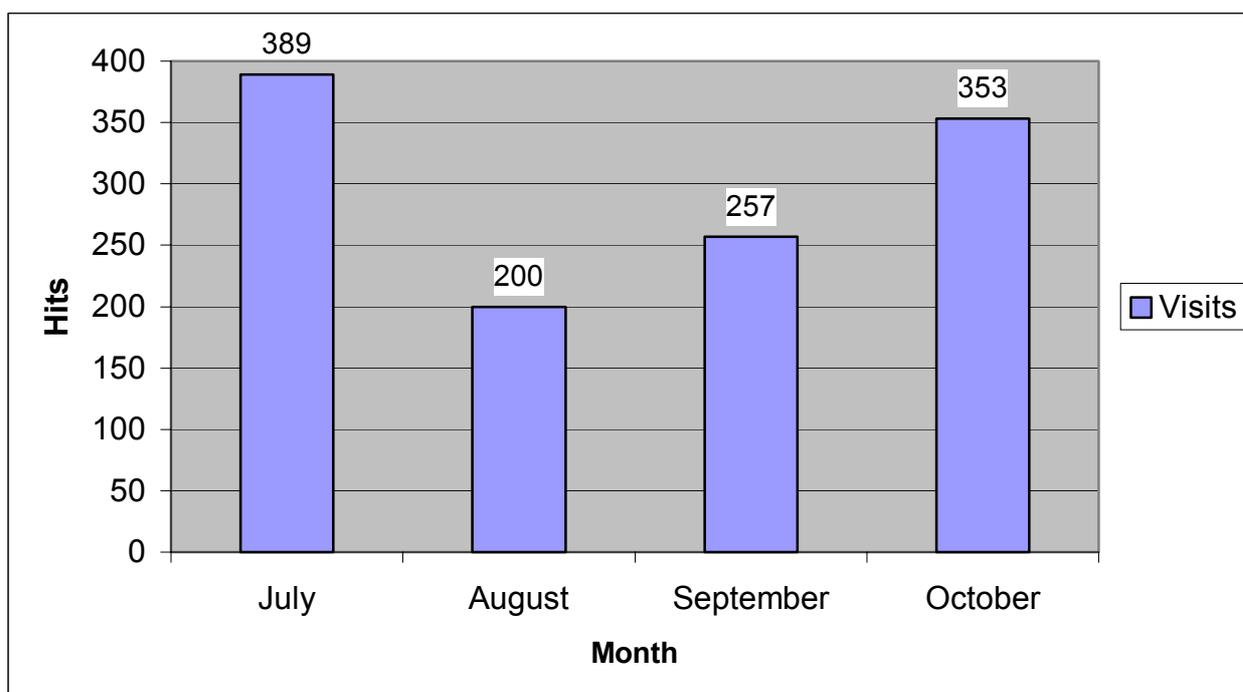


Figure 4.8: Visits to the *Goudmyn* in Year Two: Aug 2001 – March 2002



Visits to the *Goudmyn* had a slow start (Figure 4.7). The school holidays during December and June/ July of each year show a decrease in visits to the resource. The total number of visits to the resource for a single month never exceeded 200. The sharp decline in March 2002 (Figure 4.8) can be attributed to the shutting down of the server from which the resource was run. During April/May 2002 the website was moved to a new URL (www.onnet.up.ac.za) because of transitions in Higher Education¹⁴. Once the resource complied with the regulations of the new server, the University of Pretoria, a hit counter was added to the resource. This was done only in June 2002. Figure 4.9 indicates the visitors to the *Goudmyn* since then:

Figure 4.9: Visits to the *Goudmyn* in Year Three: June – October 2002



There is a definite increase in the visits to the *Goudmyn* (Figure 4.9) compared to the first two years. The average hits are never below 200 in a single month. Although it is difficult to determine the reasons for the increase in visits to the resource, it can be any of the following:

¹⁴ The former College of Education – Onderwyskollege van Pretoria – was incorporated into the Faculty of Education of the University of Pretoria .

- The resource is better known after two years of existence.
- The resource is now accessible from the homepage of the University of Pretoria's Faculty of Education.
- The resource was brought to the attention of potential users at conferences.

The visitor statistics nevertheless still show rather low levels of utilisation. This supports all of the previous findings regarding Afrikaans L1 teachers' utilisation of the Internet as an information resource (Chapter 4.1.2.2).

Five teachers have contributed excellent learning support materials to the site. They see the *Goudmyn* as a forum for collaboration and sharing. Unfortunately calls for contributions are met with resistance from some teachers. In an informal discussion one teacher mentioned: "Why must I share my stuff with others who do not work as hard as I do?" It seems that there is very much a culture of competition between schools and not an attitude of sharing and thereby lightening everybody's workload. Yet, an analysis of the data shows that the teachers who do use the *Goudmyn* appreciate it and will tell their colleagues of the initiative.

4.4 Conclusions

Afrikaans language teachers have one formal printed journal, *Klasgids*, which they use quite regularly. Newspapers, magazines and textbooks are also important information resources for the target population.

Online information resources for Afrikaans language teachers are limited to M-Web's *Onderwysnet* and *Learning Channel* (only accessible to M-Web subscribers) and the *Goudmyn* (open to all and free of charge). Although these online information resources are available for this group of teachers, the data indicates very low levels of Internet use. The most important factors for these low levels of Internet utilisation seems to be low levels of connectivity at home, a lack of time, a lack of awareness and definitely a lack of skills and training in ICTs.

The most significant information needs the respondents indicated are ideas for the classroom, the new curriculum, lesson ideas and plans, assessment strategies, and

strategies for teaching grammar and literature. There are noticeable differences between the information needs of primary and high school teachers, owing to differences in focus.

The *Goudmyn* was developed primarily to provide online support for the information needs of Afrikaans language teachers. Feedback to the webmaster indicates positive feelings and gratitude and appreciation from users of the resources. A critical evaluation of the resource suggests some improvements to the site in terms of design and editing, but is positive on the content and scope of the resource. The resource still lacks contributions from teachers.

There are certain recommendations to be made regarding the further development and management of the information resource, as well as with broader issues such as teacher training and curriculum guidelines. These will be discussed in the final chapter.