

## CHAPTER 6

### EXPERIENCES OF INTERNATIONALISATION AT UP

#### 6.0 Introduction

Having examined why UP has placed internationalisation high on its list of strategic imperatives, this chapter moves on to discuss what those rationales have led it to do in terms of policies, strategies and intended actions. As such, this chapter addresses the characteristics of UP's internationalisation and how this internationalisation is expressed. This is done by presenting the data gathered from UP stakeholders and triangulating this information with documentation and other evidence. What will be seen in this chapter is that UP has some specific expectations regarding the manifestation of internationalisation at the university. However, there are many gaps in UP's internationalisation and the measurable outcomes and outputs of that process do not necessarily match and the expectations. These gaps, along with evidence of UP's internationalisation presented in this chapter, yielded some interesting data and interpretations that will benefit the final analysis of this study.

#### 6.1 How internationalisation should unfold at UP

Internationalisation at UP is characterised by several dilemmas and contradictions concerning how it can best be engaged with. These dilemmas and contradictions begin with the very nature in which internationalisation is happening at the university. Some UP constituents believe that the process is unfolding primarily in an ad hoc manner and without proper planning and systematic institutionalisation of the process. Their argument is that the institution, with its lack of a formal and written institutional policy on internationalisation and lack of proper guidance and support from the institution's leadership, is not fully benefiting from internationalisation. For instance:

*A lot that has happened thus far in terms of internationalisation has been largely ad hoc in nature... And because we are an established institution we need to move away from that... (I: Rajah).*

I followed up by asking if an institutional policy would help:

*Yes, because otherwise every person X in Faculty X, decides oh, I can do with a link here, then off they go. But, there's no one to actually, I hate the word control, but there's no monitoring and control of that link, to say is it good for the institution, or what value is it to us, how does it add value to our academic programmes, etc...And I do believe that an institutional policy will help. It doesn't have to be a top-down you will do the following according to A, B, C, D and E. It should be a consultative process...all stakeholders from academic to non-academic departments need to be involved in framing it... (I: Rajah).*

Ms Rajah is among those who advocate for a specific policy that guides the institution's internationalisation. However, others do not believe internationalisation can be regulated. They argue that UP does not need an institutional policy in the sense of a written text which regulates and outlines what its faculties and researchers must do in terms of internationalisation. This mode of thinking about internationalisation and how it should happen at UP is expressed in the following statement:

*... you cannot tell somebody, now you're going to be a pianist, world class pianist, or you will be the world class painter. Either you will develop yourself, or you won't be. You just cannot be organised or pre-programmed, this can only be facilitated. Obviously we facilitate these types of activities, but I can't plan these. (I: Cukrowski).*

This second comment does, however, note that internationalisation is something that should be "facilitated" by the institution. Thus, regardless of whether there is an actual policy text on internationalisation at UP or not, one can gather from these two statements that there is at least an agreement that the university must play a role in helping to facilitate the process.

There were attempts at UP to develop an institutional policy around internationalisation. In fact, two specific documents were developed by the then head of Corporate International Relations (CIR, 2004c and CIR, 2005a), which attempted to offer a framework for such a policy. However, both documents remained as drafts and were not officially adopted as policies by the university. There is, however, strategic direction for internationalisation that can be taken from a document developed by a member of the executive who was charged with overseeing the Corporate International Relations (CIR) office at UP (CIR, 2006b). Documents such as these were at least an attempt to provide a framework for internationalisation at UP and even possibly to do what Prof. Cukrowski suggested in the statement above, which is to help to "facilitate" internationalisation at the university. It is yet to be seen how these strategic documents will influence overall internationalisation at UP and whether or not they will lead to an institution-wide policy on the process.

In addition to the questions around the need for an institutional policy on internationalisation, there are also dilemmas around who should be leading and guiding the institution's internationalisation. As described in a previous chapter, the UP management system is set so that the vice chancellor/rector and the members of his executive (the vice principals) comprise the main leadership and decision-making structure. Although they are overseen by a Council, and there is a Senate and other bodies around it, the executive is ultimately

responsible for the decisions and actions that UP will follow. Thus, in terms of internationalisation, some believe it should be driven from the top down, while others believe that the various faculties and individuals within them must drive the process. For instance, one UP leader argued that:

*I'm uncomfortable with initiative being taken by anybody, by every Tom, Dick, and Harry. I'll give you an example. In our operating theatre there is the patient; I'm the senior surgeon; I've got residents; and I've got other junior people, etc. Everybody else, all my residents and everyone has an idea about how to do this operation, but I've got my own options. At the end of the day it's my decision. Because I carry the ultimate responsibility (I: Mogotlane).*

This is one view on the need for the management of internationalisation to come from the top; however, the more common response that I received was that it must come from the individual faculties and, even more specifically, from the individuals within those faculties. For instance, one dean stated that:

*It can be advocated from the top, but the culture of internationalisation should be driven by mechanisms and processes within the departments that are already there and then expanding this culture step by step to other units that show the potential. If there is enough critical mass within your faculties which creates this environment, the university can say, we're truly there. But it's not going to happen from the top down, it's going to happen really from our researchers who start mentoring our younger people (I: Ströh).*

Despite these dilemmas and the contradictions around how internationalisation should happen, whether or not there needs to be a definitive policy and who should lead the process, those with whom I spoke did believe that internationalisation, as I have defined it herein, is of strategic importance to the university. There was thus a common belief that internationalisation is happening at the university, although my observations and data indicate that internationalisation at UP is in its beginning stages. The stakeholders involved hope that the process of strategic planning around internationalisation will bear the appropriate fruit, which will lead to the university's improved international profile, continental contribution and national relevance.

## **6.2 Strategic expressions of internationalisation at UP**

Given the belief that internationalisation is of strategic importance to the university, we must then ask: what are the expressions of internationalisation that UP wishes to use, or is using, to reach its goals? Chapter 1 (section 1.5) discussed the common expressions of internationalisation of HE as described in existing scholarship. These included: virtual and physical cross-border activities such as faculty exchange/development; student exchange and

study abroad programmes; collaborative research; collaborative teaching; joint conferences (Mthembu et. al., 2004, p. 113); international dimensions in the curricula; branch campuses; international institutional partnerships and collaborative agreements; transnational university mergers; and transnational virtual delivery of HE (Van Damme, 2001, pp. 418–428).

Of these varying expressions of internationalisation which HEIs around the world are engaging in, UP's internationalisation is intimately linked to its research and research production/output ambitions. Its most visible and often cited expressions of internationalisation are therefore related to research. In terms of current internationalisation at UP, the institution primarily views the following three interrelated expressions of internationalisation (i.e. how it is more intensively and strategically engaging in international activities) as key:

- international collaborations, networks and partnerships
- faculty and researcher international mobility (inbound and outbound)
- postgraduate student international mobility (inbound and outbound)

The following two statements support my notion that these are the three main areas of internationalisation that UP hopes to engage in:

*I think the main crux [of internationalisation] at UP is two-fold. The one is the attraction of good international students. UP does have a strategic focus area, namely the postgraduate international students, at the masters and PhD levels...So, it's two-fold (I: Rajah).*

*Getting our academics to interact internationally and do research collaborations and things like that. And joint research projects and groups, and raising the profile internationally of UP. That is important for UP (I: Mogotlane).*

UP's new strategic plan (UP, 2007a) also indicates that these three expressions of internationalisation are key strategic ambitions, as will be shown through quoting several aspects of the plan in this chapter.

### **6.2.1 International collaborations, networks and partnerships**

Strongly relating to UP's strategic motivations and desires to be an "international player" and an "internationally recognised research university", is the participation of the institution and its faculties and researchers in international collaborations, networks and partnerships. These partnerships are entered into primarily to lead to increased knowledge production and research outputs, as well as to address many of the developmental challenges that have been

spoken about herein. UP leadership sees the establishment of such international relations as a priority for the university:

*I think with the challenging situation in the country from the early 90s, and accelerating from then, we needed to develop a set of international engagements which are much more intensive. And for it to be seen as a strategic initiative for the university (I: Crewe).*

These international collaborations have been facilitated and carried out primarily via the signing of formal memoranda of cooperation and/or understanding (MOCs or MOUs). At UP, an agreement with another university or institution only becomes an official institutional agreement if it has the participation of at least two of UP's nine faculties, along with the signature of the vice principal or someone to whom the vice principal has delegated as a signatory. According to its CIR office records, UP had approximately 96 "official" international institutional partnerships as of February 2007 (CIR, 2007). This is a significant increase from the 22 agreements reported in 1995 (UP, 1996). The CIR began keeping records of official institutional agreements in 2001. The annual figures are as follows: 2001, 46 international institutional agreements; 2002, 65; 2003, 71; 2004, 74; 2005, 70; beginning of 2006, 69 (CIR, 2007, 2006c, 2005c, 2004d, 2003b, 2002, and 2001). A complete list of the institutions with which the university has these agreements, as of February 2007, is found in Appendix 5. Although the annual increases from 2001 are not huge, the quadrupling and doubling of such agreements since 1995 and 2001 respectively, demonstrates that UP has been actively pursuing international institutional agreements during this period.

In addition to the 96 official UP agreements reported in 2007 and the involvement of the various faculties in them, UP faculties have also entered into numerous agreements of their own. Box 2 summarises some of these 96 agreements in terms of the role of the faculties involved in them. As can be seen, the Faculty of EDU and the Faculty of NAS have entered into at least 17 and 28 international agreements respectively, demonstrating their commitment to internationalisation through international institutional collaborations.

Even though it could be argued that some of these agreements at the institutional and faculty levels are more active than others, and that some yield more research outputs, student exchanges and other collaborative international activities, the mere signing of these agreements by the university executive and two of its faculties, demonstrates a commitment to international engagements through collaborative relationships with HEIs outside of South Africa. The importance of these international institutional agreements and collaborations is

underscored and stressed by the following: “Collaboration agreements with foreign universities enhance the University’s role as an international player and increase global recognition and excellence” (UP, 2005a, p. 17).

I shall return to the issue of active and non-active agreements shortly. However, for now, as Box 2 shows, UP has involved itself in numerous international collaborations, networks and partnerships. One of the major reasons for the increased attention paid to such collaborations is for joint research collaborations. It is obvious even through a surface level review of UP’s strategic documents or in brief discussions with institutional leaders (although this study is of course a deeper investigation) that research is UP’s focus, the aim of which is to become a successful and contributing HEI in South Africa and globally. In his opening message in UP’s 2005 research summary publication, the vice chancellor and principal writes that:

*In our strive towards increased international competitiveness and a higher quality of life for all South Africans, there is a general realisation in the country that our national research effort must be enhanced. As a leading research university, the University of Pretoria will not only rise to this challenge, but also make a major contribution both with regard to research outputs as well as the training of researchers...Co-operation is the key towards leveraging research impact, and hence the University will continue to not only emphasize but also increase co-operation with the public and private sectors as well as the science councils, locally and abroad (UP, 2002b, p. 3).*

The vice principal’s statement, as well as other previously mentioned statements, reveals that international collaborations are placed high up on UP’s strategic objectives’ list. This evidence also tells us that international collaborations are a key in this regard, and the resultant activities of UP and its various functioning parts, such as the faculties of EDU and NAS, reflect this. For instance:

*...this faculty, like the university as a whole, was terribly isolated as you know, for various reasons, academic boycott being one of them. And...the major links that this university had before 1994 were a few tenuous links with the Belgium universities and Dutch universities and so on...it wasn’t even connected to its other national institutions, etc. So...we decided that there is no way you could call yourself a national university unless you were intimately connected to the world of universities, of scholars, etc., elsewhere, and so we embarked quite aggressively on bringing in people here, but also sending people out there (I: Jansen).*



**Box 2****Summary of UP international institutional agreements and faculty agreements (as of January 2007)****INSTITUTIONAL AGREEMENTS**

According to Corporate International Relations (CIR) Office records there are a total of 96 institutional agreements, of which:

- the Faculty of Economic and Management Sciences is involved with 22
- the Faculty of Education is involved with 12
- the Faculty of Engineering, Built Environment and Information Technology is involved with two
- the Faculty of Health Sciences is involved with eight
- the Faculty of Humanities is involved with 14
- the Faculty of Law is involved with five
- the Faculty of Natural and Agricultural Sciences is involved with 18
- the Faculty of Theology is involved with six
- the Faculty of Veterinary Sciences is involved with two

Summary: The Faculty of Economic and Management Sciences is involved with the most institutional agreements (22) at UP and the Faculty of Engineering, Built Environment and Information Technology and the Veterinary Sciences Faculty are involved with the least (two).

**FACULTY (ONLY) AGREEMENTS**

Some faculties also have stand alone (faculty only) agreements with international institutions. Below is a list of faculties and the number of international institutions with which it has stand alone (faculty only) agreements:

- the Faculty of Economic and Management Sciences – seven
- the Faculty of Education – 17
- the Faculty of Engineering, Built Environment and Information Technology – three
- the Faculty of Health Sciences – three
- the Faculty of Humanities – six
- the Faculty of Law – two
- the Faculty of Natural and Agricultural Sciences – 28
- the Faculty of Theology – 12
- the Faculty of Veterinary Sciences – seven

Summary: There are a total of 85 stand alone (non-institutional) faculty agreements according to IRO records. The Faculty of Natural and Agricultural Sciences has the most (28) and the Faculty of Law has the least (two).

It should be noted that the above does not include informal agreements between individual staff and faculty members.

Source: Compiled by the researcher while working in the UP CIR

The opening up of South Africa after 1994 not only saw HEIs in the country, including UP, seeking to integrate with the rest of the world, but it also opened up many opportunities for the institutions to engage in various ways, including through institutional partnerships. What can be seen by the above statements, and UP's increasing partnerships with non-traditional partners, is recognition and subsequent action by the institution that it must be integrated into the greater global village outside of these traditional partners.

This is not to say that UP's (and its faculties') relationships with its traditional partners has ceased. In fact, the university continues to have numerous partnerships with these traditional partners in Europe, but it has realised that it must also tap into other areas of the world. UP is

particularly keen on establishing links and engaging with other developing countries in the South, as well as with countries in the East, such as China and Singapore.

*The university currently would strongly like to focus on developing research programmes with countries in the East like China and India...Also important is to include various South American countries. Countries that mainly have similar research questions to us, we have to see if we can't assist each other in our findings (I: Ströh).*

As can be seen in Appendix 5, UP had a total of 96 official institutional partnerships as of February 2007: there were 42 signed agreements at the institutional level with European HEIs, nine with Asia and the Far East, 27 in the Americas and 18 with African HEIs.

Many of the international collaborations that UP and its faculties and individual researchers have entered into lead to research outputs in the form of journal publications. According to UP's 2006 Research Report (UP, 2007b), 75% of the more than 1,230 journal articles produced by UP researchers (individually and with research partners), appeared in journals that are listed on international publication indices such as Thomas Jefferson University's Institute for Scientific Information (ISI) and the London School of Economics' International Bibliography for Social Sciences. Publishing indices such as these, and specifically the ISI, are used in rankings of international academic institutions. For example, Shanghai Jiao Tong University's Institute of Higher Education has an academic ranking of world universities, which began in 2003. Shanghai Jiao Tong University lists the top 500 world universities based on several criteria, including the quality of its faculty (40%), its research output (40%), the quality of education (10%) and performance of the institution versus its size (10%). These publishing indices have also been used by the South African government since 2004 to pay subsidies to institutions based on their researchers' publications in journals. In other words, if a research article is published in a South African or a foreign journal listed on one of these indices, the South African government gives credit and thus a subsidy to the institution and the relevant researcher.

One could look at UP's publication in internationally-based journals versus its publication in domestic/local-based journals as an expression and measure of internationalisation. However, this approach has limitations that make me hesitant to do so in this study. Primary among these limits is that many South African journals are listed on international indices. Journals such as the *South African Historical Journal*, the *South African Journal of Animal Science* and the *South African Journal of Botany* could be classified as internationally recognised. It



therefore seems more useful to look at how the South African national government views publications in these international indices, and thus appropriates funding and subsidies. For instance according to statistics from UP's Department of Research Support (DRS), UP was given credit for 455.11 research units in the ISI in 2005 and 526.1 credits in the same index in 2006 (DRS, 2005 and 2006). Several of the journal articles that were produced in those years were in South African-based journals that are listed on this international index. As highlighted in earlier quotes by UP researchers, the journal production output of UP researchers, particularly in international indices, plays an important role in UP's drive to reach its goal of international competitiveness.

In terms of its international research contracts, one UP leader disagrees with the earlier views expressed herein and argues that the contracts are not being done in a strategic manner:

*What I think has happened is that you've got much more collaboration, but I don't think it's been anything of a real strategic nature. The collaborations are between researchers and between groups...it is extremely valuable to the researchers and so we shouldn't put down the fact that it's between researchers (I: Jeenah).*

This comment reveals that there is a value placed by UP on the relationships and partnerships between individual researchers from South Africa and abroad, as well as the institutional linkages. It also reveals that these partnerships do not necessarily have to be "strategically" planned. In fact, some individuals with whom I spoke argued that it is not even possible to be strategic about internationalisation when it comes to encouraging partnerships, because one cannot "make" another researcher engage internationally if that person is not interested. According to one HOD:

*I think that we must leave academic freedom of what they want to do [researchers] and how they want to do it, so that they can develop themselves. And I don't think this can be regulated. You cannot say, if I asked you, now I want you to be a famous composer, can you do this? Probably not...so it doesn't help...But, if we have a strategy as this faculty and university, and when we look for new people coming, then we can fine tune it...We can bring and attract people of high standards and this is what we try to do (I: Cukrowski).*

As alluded to in other sections of this chapter, international networks and collaborations with African researchers and institutions is also an important element of UP's internationalisation, mainly because of the continental development rationale discussed in the previous chapter. UP's 18 official collaborations with African HEIs demonstrate some sense of the importance of African collaborative networks, as do the many networks of African researchers and research institutions already mentioned herein.

This evidence demonstrates that international collaborations, networks and partnerships are one of, if not the, key expressions of internationalisation that UP is attempting to engage in. This can best be surmised in the following statement made in UP's newest strategic plan (UP, 2007a):

*Nowadays, many research projects are done collaboratively. Establishing academic networks is important for this purpose. It is, therefore, our intention to encourage leading academics at the University of Pretoria to work with leaders in other universities here and abroad. Situated in the diplomatic capital of Southern Africa, the University of Pretoria is ideally placed to forge links between African and other continents, to be the interface between excellence in Africa and excellence elsewhere, and to be the cutting edge in research between excellence, relevance and impact. Visiting academics will be encouraged to present lectures and to assist in supervising research students (p. 21).*

*The impact of international collaboration is increasing, making it important to enter into partnerships with suitable institutions across the globe. We intend developing a structured policy on internationalization to deal with these issues (p. 32).*

A critical issue to note here is that these research collaborations, partnerships and networks that are created and engaged in by UP (and HEIs worldwide) are done so at UP specifically through interactions between individual researchers and groups of researchers. As such, the support for such activities (research) is a major issue at UP.

*...your staff must be globally oriented...they need to maintain a set of international networks which will make them familiar with what is happening in their field, which will allow them to reflect that in what they teach their students. So, for instance, we encourage the staff to get NRF ratings. Because the NRF rating is essentially a peer review mechanism, which says: to what extent is the work that you are doing recognised by your peers internationally? And we think that is an important dimension of the development of their careers (I: Crewe).*

An elaboration on the issue of active versus non-active international agreements for UP demonstrates some of the contradictions between UP's ambitions for internationalisation and how those ambitions are actually fulfilled. This issue is not unique to UP, as many HEIs have signed MOUs and MOCs with other institutions that never meet their full potential. However, in the case of UP, as its former CIR once put it, many of the institution's agreements remain "NATO" agreements, meaning "No Action, All Talk". This is seconded by the following two statements from others:

*[The University] has a long list of collaborations and formal agreements. Many of those are just paper. And I'm not interested in those sorts of agreements. Very often what makes those collaborations or those MOUs work is individuals. When you have two people that get on and they want to collaborate. Otherwise they're dead (I: Cloete).*

*True collaborations that are in force and not just on paper...we have plenty of paper work...I'm talking about real collaborations (I: Cukrowski).*

A hurdle for UP in terms of actually determining the usefulness and levels of its international institutional and faculty agreements is the lack of an adequate tracking and reporting system to gauge such partnerships. There have been recent attempts at UP to better gauge the nature and actual activities that have resulted from its international MOUs, such as a 2006 CIR office effort and the development of a database. Additionally, the university's institutional agreements advisor has since 2001 attempted to develop quarterly reports on UP's institutional agreements. However, these efforts have not been very successful and it is still not known exactly how many active institutional and even faculty agreements UP really has. It would be a useful research study to look at which UP agreements are most effective and active, but this is another doctoral thesis altogether. I do, however, later in this chapter (section 6.3.1 and 6.3.2) discuss some of the agreements at UP that have been quite active, which provides evidence that such agreements exist. What is important to note here, for the purpose of my study, is that UP has the ambition of linking and collaborating with international institutions and, in fact, it has signed agreements with many.

Additionally, outside of the "formal" institutional agreements that UP has signed with international institutions, UP is involved in many research-based partnerships with governments, non-governmental organisations, private corporations and international academic institutions. These involvements specifically concern research collaboration as opposed to the MOUs and MOCs signed by UP, which might also have elements of student and faculty exchanges. This is not to say that the research collaborations do not involve the mobility of individuals, as they may. It is just that the research collaborations are specifically designed and funded around a particular research issue.

Table 11 shows UP's research collaborations since 2002. It lists 14 different types of organisations with which it partners, and whether the partnerships are with internationally based organisations or with locally/nationally based organisations. These collaborations have allowed UP to address various research concerns. Many of the research collaborations are between individual UP researchers and their colleagues at international organisations or universities. For instance, in 2003 a UP Department of Zoology and Entomology researcher partnered with the American Museum of Natural History in the US on a project dealing with the biology of fragmented populations. Likewise, in 2005 another UP researcher collaborated with the Japan International Cooperative Agency on a research project around science,

mathematics and technology in education. These research collaborations take place at and with the international HEIs with which UP has its official partnerships, as well as with those that have not entered into formal institutional agreements with UP.

Although there were a reported 506 international research collaborations in 2006, the more interesting deduction from Table 11 is the slow growth in such partnerships since 2002. In 2002 there were 487 international partnerships, which means that the number of partnerships increased by only 19 between 2002 and 2006. Even more interesting is the number of *international* research collaborations as a percentage of the total number of collaborations between 2002 to 2006. In 2002 61% of all the research collaborations were international, whereas in 2006 this percentage had dropped to 58% of the total. This could signal that UP researchers are collaborating more with local partners and less with international partners. Those who believe that internationalisation is not a reality at UP might use the declining number of international research collaborations in term of the total percentage of UP's research collaboration, as evidence of such. My interpretation of these figures, however, is that UP, in an effort to play a national/local role – as its strategic thrust of being a “nationally relevant and globally competitive university” articulates – is attempting to place more emphasis on working with national/local partners on research issues of concern to the country.

This interpretation is also supported by what several UP stakeholders cited as the university's historical reputation as an institution that was not relevant in terms of the majority of the local South African society and the ramifications of that legacy, which now make it easier for the institution to partner with international partners rather than with domestic ones. However, even though several stakeholders commented on this issue, there was common agreement among them that UP needed to play a larger role in terms of local/national issues while still engaging with the rest of the world. In the final chapter I will examine further the varying potential interpretations of this data, as well as the issue of balance between the local/national collaborations and the contributions of UP and its international work.

<b>Table 11: UP's research collaborations</b>															
	2002			2003			2004			2005			2006		
<b>Partner institution type</b>	<b>IR</b>	<b>AR</b>	<b>% IR</b>	<b>IR</b>	<b>AR</b>	<b>% IR</b>	<b>IR</b>	<b>AR</b>	<b>% IR</b>	<b>IR</b>	<b>AR</b>	<b>% IR</b>	<b>IR</b>	<b>AR</b>	<b>% IR</b>
Government: Local	1	26	4	1	7	14	0	6	0	0	7	0	0	6	0
Government: National	22	22	100	23	71	32	20	70	29	20	70	29	19	60	32
Government: Provincial	4	22	18	4	21	19	0	16	0	0	16	0	0	11	0
Government: SETIs and parastatals	18	52	35	17	60	28	17	58	29	18	56	32	17	49	35
Higher education: Other	8	12	67	7	12	58	6	10	60	11	15	73	10	12	83
Higher education: Universities of technology	1	7	14	1	11	9	1	11	9	1	10	10	2	17	12
Higher education: Universities	286	312	92	310	341	91	316	353	90	342	384	89	328	350	94
International organisations	38	40	95	34	39	87	30	33	91	32	34	94	41	43	95
NGO/Non-profit organisations/interest groups	58	99	59	55	96	57	52	89	58	48	87	55	43	72	60
Private sector: associations (industry/business)	10	50	20	11	59	19	10	55	18	6	58	10	5	63	8
Private sector: Multinational companies/corps	23	40	58	21	50	42	20	52	38	17	48	35	19	50	38
Private sector: National companies	10	97	10	11	110	10	11	111	10	12	115	10	10	102	10
Other	8	19	42	8	22	36	8	21	38	13	26	50	10	19	53
Southern African conservation organisations	0	0	0	0	0	0	0	0	0	0	0	0	2	19	11
<b>TOTALS</b>	<b>487</b>	<b>798</b>	<b>61</b>	<b>503</b>	<b>899</b>	<b>56</b>	<b>491</b>	<b>885</b>	<b>55</b>	<b>520</b>	<b>926</b>	<b>56</b>	<b>506</b>	<b>873</b>	<b>58</b>
<b>TABLE KEY</b>															
AR = All research (including local and international)															
IR = International research															
% IR = The percentage of the total research that is international in nature															

Sources: UP, 2003c; 2004b; 2005b; 2006b; 2007b

Regardless of the interpretations of the data in Table 11 concerning UP's research collaborations, the point to be made here between these collaborations and its other international collaborations, networks and partnerships, is that UP has placed strategic importance on interactions with its global partners. As such, this is one of the broad strategic expressions of internationalisation at the university. As can be seen, however, it is characterised by contradictions between principle and practice.

### 6.2.2 Faculty and researcher international mobility

UP is also placing a great deal of attention on the mobility of academic and professional faculty, staff and researchers (from this point forward in this section I will refer to all three as professional researchers) out of and into its various campuses. Again, the emphasis and desire

for movement among professional researchers is due to the desires and beliefs that this mobility of individuals is a key facilitator of research and knowledge sharing and production. The mobility of professional researchers at UP is being facilitated in several ways, including through postdoctoral (postdoc) programmes, staff travel and bursary programmes administered by the university, and through other outside grant programmes to assist professional researchers with travel to engage in international research-oriented activities and conferences.

International postdoc programmes are seen as important for both UP professional researchers going abroad for such programmes, as well as for UP bringing in professional researchers from abroad to do postdoc programmes on its campuses. The notion of the importance of international postdocs was supported by the director of research who stated that:

*We're primarily looking at bringing international postdocs to South Africa. We're also encouraging our researchers to actually go overseas and do a stint (I: Jeenah).*

Other UP stakeholders commented on the importance of postdoc programmes to the university's research interests and international standing, such as the following:

*The faculty is actively participating in the UP postdoc programme. In fact more than half of the postdoctoral fellowships are awarded to this faculty. (I: Ströh).*

*...for people that do the PhD, one of the things that we have recently been encouraging them to do is go on for postdocs...for some of the academic staff of the faculty who normally do not traditionally do research, but we encourage young staff to do it and give them means to do it; to go and spend a postdoc period abroad. Simply to be engaged with a different set of ideas and a different set of interactions with other people (I: Crewe).*

This desire to engage more professional researchers in international postdoc programmes is also evident in the levels of funding at UP for such programmes. For instance, in 2005 UP allocated R3.4 million to the development of human capital through postdoc programmes aimed at supporting “research fellows who have obtained their PhDs from a university other than UP. Through this initiative, highly talented academics are introduced into the UP environment and this plays an important role in the internationalisation of the University” (UP, 2006b, p. 16).

However, even given these claims by UP that it wishes to, and indeed is engaging in, more faculty and researcher international mobility (inbound and outbound) it is difficult to obtain



useful and consistent statistics and data to support that claim. For instance, attempts to obtain information on exactly how many individuals are involved and what countries they come from, were unsuccessful. The university unfortunately does not keep systematic records of the inbound and outbound professional researchers who are funded to participate in international postdoc and research programmes. As I was told by one of UP's vice principals when trying to request such information:

*The difficulty with this request is that we do not keep summaries of the information that he [Carlton McLellan] is seeking. In order to compile these data, we would need to go through the financial records of all the faculties manually to extract the data. This will be time consuming and we do not have the human resources to undertake such a study (Prof. Crewe).*

Additionally, there is other evidence that points to UP's shortcomings vis-à-vis its tracking of faculty and researcher mobility internationally. In terms of UP's official public reporting on its activities and status – its annual reviews – the university shows some inconsistencies in how it reports internationally-oriented information, such as faculty and researcher mobility. For instance, the 1997 Annual Review (UP, 1998) reported that 15 international postdoctoral fellows were being funded by UP funds (p. 24). The following year's review (UP, 1999) reported that: "Twelve staff members and fourteen post-graduate students received support from a central university fund to study and do research abroad, while 34 overseas post-doctoral fellows were appointed with university funding" (p. unnumbered). Finally, in the 2001 Annual Review (UP, 2002a) it is reported that "...201 members of staff undertook 423 study or outreach visits to 342 institutions in 46 countries" (p. 96). In subsequent annual reviews, while there is mention of funding for these same activities, there is no mention of the quantities of professional researchers, postdocs and/or postgrad students supported for these international activities. The three instances cited here seem to be among the few instances where UP attempts to report on the number of international postdocs and the mobility of its professional researchers internationally.

Even given its inadequate tracking and reporting system with regard to its international postdoc researchers coming to the university, the UP research report (UP, 2006b) also makes claims about the importance placed by UP on sending its own PhDs abroad for postdoc programmes. This claim is also partially supported by such programmes as UP's Research Development Programme, which it claims disbursed nearly R2.4 million in funding for current staff to participate in international postdoc programmes to further their research (ibid). However, as with information on professional researchers coming to UP, efforts to

obtain the exact number of individuals who used these funds and for exactly what purposes, were unsuccessful due to UP's inadequate tracking and reporting mechanisms. This unavailability of information on the number of individuals taking advantage of these funds, as well as on the financial distribution of UP's research funding for such activities, could be explained in several different ways. First, it could signal that although UP makes strong claims of supporting individual professional researchers' international efforts through these funding mechanisms, there may need to be a more systematic way of tracking and reporting such cases. It could also signal that if the university already has systems to track and keep records of this type of data, such data is simply not available for public review. Regardless of why this information was unavailable to me, what is important to note here is that UP at least makes the claim that it provides funding mechanisms to support this expression of internationalisation – faculty and researcher international mobility – in the hope that its internationalisation will be strengthened. Thus, both the inbound and outbound participation of individuals in international postdoc activities and programmes are at least a key ambitions for UP.

Another area of the researcher mobility expression of internationalisation at UP is the travel of its professional researchers for varying periods of time to conduct research on issues relevant to their interests abroad. This travel occurs in numerous ways including: conference travel; travel to engage in lectures and to present papers at conferences; general international travel for networking and establishing research contacts; and travel to conduct research on specific topics. Numerous UP staff members supported the notion of staff mobility in the context of our discussions on their various personal international activities, as well as in discussions on the most effective ways to internationalise.

*I see an easy path...To start out with staff, which in my mind is a relatively cheap and inexpensive way of getting internationalisation. Often you can't send 10 or 50 students to different institutions, but you can and should actually force staff to use their sabbaticals and spend time at international institutions, and come back and give back from what they've done...so you create that linkage between different institutions, because it's a relationship between individuals...There has to be individual people who know each other (I: Van Zyl).*

UP does attempt to support the international travel activities of individual staff and professional researchers. For instance, in addition to the postdoc and research development a programme discussed in the previous section, UP also runs a Staff Exchange Bursary Programme. This programme allows UP staff to go abroad for research at an institution with which UP has a partnership, or for a UP department to bring a researcher from a similar

institution abroad to the university to conduct research. However, according to data I gathered from the office administering this programme, only R25,600 was awarded to staff in 2005. This small amount of funding going to staff international travel signals either that staff are unaware of the available funding or that some other administrative hurdles might exist, which is preventing more of that funding from being used. Although the programme does seem to be underutilised, its existence at least signals recognition by UP that staff international mobility is relevant to its research success. Also, as indicated previously, UP's tracking and reporting of professional researchers going abroad for these international activities is inconsistent, which does not allow for adequate analysis of how many UP researchers are really "to-ing and fro-ing" internationally. The challenge then is for UP to develop good systems for tracking. And where staff travels is being tracked, such as in the Staff Exchange Bursary Programme, UP must ensure that more staff know about the programme and that they have opportunities to take advantage of it.

Outside of UP, the National Research Foundation's (NRF's) International Science Liaison Office awards grants to individual professional researchers to engage in overseas research. As can be seen in Table 12 below, UP professional researchers take advantage of one of their programmes and the university has been awarded nearly 200 grants totalling more than R15 million since 1996.

<b>Table 12: NRF international science grants to individual researchers at UP</b>						
<b>Year</b>	<b>No. of grants</b>	<b>Total rands</b>		<b>Year</b>	<b>No. of grants</b>	<b>Total rands</b>
1996	9	226 614		1997	6	287 232
1998	14	525 038		1999	20	1 250 787
2000	17	513 686		2001	29	1 237 155
2002	22	1 123 175		2003	23	2 822 631
2004	5	924 630		2005	24	3 428 558
2006	28	3 571 152				
<b>TOTALS ALL YEARS = 197 grants/ R15 910 658</b>						

Source: NRF Information Services

When discussing leadership positions in international organisations, one faculty of NAS HOD stated that:

*I'm involved in international associations, such as the International Union of Forestry Research Organisations. It represents about 20,000 forest research scientists around the world, so it's huge. It's 110 years old and has offices and groups all over the world. I sit on the board of the management committee which is about six people and the board is about 120. All of those kinds of associations are things that [individual] scientists and academics do. That's part of the global wealth of knowledge. And these have a huge influence on our research, because I meet people from all over the world all the time who would like to come*

*work here, or do a sabbatical here or research leave or send students or something...Those are programmes that promote collaboration between people... (I: Wingfield).*

There is also evidence that UP desires to engage with professional researchers across the African continent. This is primarily taking the form of UP professional researchers going to other African countries to participate in research networks, conferences, training sessions, etc.

*...its clearly in South Africa's national interest to have a group of really expanding relationships with other countries in the region and the rest of the continent, and part of that is by creating networks of individuals who move between institutions and begin to understand what is happening internationally and who engage and can assist with those developments (I: Crewe).*

Engagements and relationships by individual professional researchers at UP with their African counterparts is facilitated in numerous ways, as highlighted elsewhere, and which one UP leader termed “to-ing and fro-ing”:

*Regionally, let's talk about SADC. We have embraced the SADC protocol. And um, we engage, I engage personally, because one of my portfolios is veterinary science, engage very much with the vet schools in the region and there is a lot of to-ing and fro-ing between the vet schools...(I: Mogotlane).*

This “to-ing and fro-ing” was also spoken of by a number of other UP stakeholders. Much of it leads to other activities that relate to researcher mobility, including the development of continental research networks and groups of professional researchers seeking to tackle specific issues. For instance, in the Faculty of EDU's Department of Distance Education, many such networks have been created through professional researchers' “to-ing and fro-ing” around the continent. Some of these networks include: the Distance Education for Teacher Education in Africa; African Council for Distance Education; Pan African Platform for Distance Education; South African Association for Distance and Open Learning; South African Institute for Distance Education; and Teacher Education in Sub-Saharan Africa. All these networks now exist because of the interactions and travel among and between individual African professional researchers, and supports the notion that researcher mobility is important for UP (and for continent of Africa as well).

Another example of UP's emphasis being placed on researcher mobility, particularly South African professional researchers' engagement outside of South Africa with their international

counterparts, can be seen in the Faculty of EDU's Young Scholars Development Programme (YSDP), developed in 2000. According to the dean:

*...when I came in six years ago, we decided that there is no way you could call yourself a national university unless you were intimately connected to the world of universities, of scholars, etc., elsewhere, and so we embarked quite aggressively on bringing in people here, but also sending people out there (I: Jansen).*

The primary purpose of the YSDP is to accelerate the development of individual academics in the Education faculty, through their spending a minimum of three months and a maximum of one year at an overseas university. During the course of the overseas experience, the YSDP recipient was required to produce certain deliverables, including one or more of the following: the completion and submission of two research articles for publication; the completion of a major research proposal on theories of policy process in developing countries; or the successful recruitment of research funding from two international foundations sponsoring classroom-based research in South Africa. This programme was highly successful. Several staff members took advantage of it, and returned to the faculty/university with new international contacts and experiences, which were part of the original goals of the programme.

Several other comments across faculties also demonstrate the value placed on individual researcher mobility for the university:

*...at the individual level with the staff here, we're also encouraging them to establish contacts with people in their respective areas to provide the possibility of their coming here or us going on an exchange visit...And, as you say whatever networking is going on is done on an individual basis, based on one's contacts or recognition in that particular area (I: Onwu).*

*...I have been constantly told by my mentor that it is of crucial importance that one should from the beginning of your postgraduate studies get involved interacting with international colleagues. Internationalisation is not a matter of just us connecting to the globe, but to have a relationship of people travelling back and forth, and this is what will make this institution, at the end an institution with a true culture of internationalisation (I: Ströh).*

*...it is kind of policy in our department that we expect every researcher to go overseas at least once every year for a conference, to...present a paper. That is something that happens every year and of course they go there for conferences, they meet different people. This is sort of the first type of collaboration which we have with outside universities (I: Lubuma).*

All these comments provide evidence that UP (and its faculties) sees an importance in its professional researchers gaining international experience as well as in bringing international

professional researchers and their knowledge to the institution. This expression of internationalisation – that is, researcher mobility – is a key method of developing research capacity among individuals and departments at UP, and thus in bringing the university closer to its goals of global competitiveness, national relevance and becoming an internationally recognised research university. As alluded to briefly in the previous paragraph, this mobility of professional researchers also helps to establish, facilitate and maintain the third of UP's main expressions of internationalisation, which is international research collaboration and joint research projects.

### **6.2.3 Postgraduate student mobility**

The third and final primary expression of internationalisation at UP, at least in terms of its ambitions, is postgraduate student mobility. As can be seen in Table 13 the number of international postgraduate students at UP has increased almost six times from 1997 (186) to 2006 (1102). This is partially due to efforts on the part of the various faculties at UP to increase their research base.

Postgraduate students are seen as keys to research given their contribution to research projects being engaged with by the faculty staff, as well as their production of new knowledge through the research carried out for their dissertations. Thus, bringing in more postgraduate students from abroad is one of the key methods that UP is using, and plans to use, to increase its research capacity and output, and which will in turn make it the “globally competitive and nationally relevant” as well as “internationally recognised research university” that it hopes to be. For instance, an HOD stated that:

*International students coming to study here, that is one of the priorities of our department, especially at the postgraduate level...one of the priorities will be to develop extensively and to market seriously our postgraduate programme and we would really like to have more students coming from other African countries...this will be the new impulse to our postgraduate programme (I: Lubuma).*



**Table 13: International student enrolments at UP**

Table 13: International student enrolments at UP										
UNDERGRADUATE					POSTGRADUATE					TOTAL
Year	SADC countries	Other African countries	Other countries	Total	SADC countries	Other African countries	Other countries	Post-doctoral associates/fellows	Total	
1997	46	2	86	134	113	10	63	0	186	<b>320</b>
1998	66	8	109	183	146	31	69	0	246	<b>429</b>
1999	110	13	131	254	178	53	90	26	347	<b>601</b>
2000	147	26	149	322	197	119	97	19	432	<b>754</b>
2001	200	36	188	424	241	212	132	22	607	<b>1 031</b>
2002	273	56	233	562	307	249	172	23	751	<b>1 313</b>
2003	347	101	274	722	333	285	251	25	894	<b>1 616</b>
2004	771	133	332	1 236	379	337	287	31	1 003	<b>2 239</b>
2005	718	168	337	1 223	422	307	277	34	1 006	<b>2 229</b>
2006	810	193	336	1 339	462	357	283	40	1 102	<b>2 441</b>

Sources: 1997 Stats from UP, 2001, p. 13 (1997); 1998–2005 stats from UP Bureau for Institutional Research and Planning, Management Information; 2007 stats from UP, 2007a, p. 29.

It is also clear in UP's new strategic plan that international student recruitment will focus on postgraduate students due to their role in research. One section of the plan (Objective 2.3: Attracting, selecting and retaining talented students), for instance, features a section titled, "The importance of recruiting postgraduate research students". This section clearly states that:

*In line with the University's goal of becoming an internationally recognised research university, the emphasis will shift to postgraduate work and research, especially in those disciplines where critical mass has been reached at undergraduate level to sustain departmental activities economically. Particular efforts will be made to attract science, engineering and research students, both locally and abroad ((UP, 2007a, p. 14).*

A subsequent section highlights further the importance of postgraduate students (including international ones) to the institution:

*The University has in the past and will increasingly in the future emphasise and encourage good postgraduate programmes that lead to research-based higher degrees. We will make every effort to attract and retain the best selection of postgraduate students from South Africa and abroad to participate in these programmes, thereby fostering the internationalisation of the University's activities. It is our intention to increase postgraduate, relative to undergraduate, enrolment so as to emphasise the importance of research for the University's reputation as an academic institution of note. The emphasis will be on research students (UP, 2007a, p. 19).*

Although both statements discuss domestic and international postgraduate students, it is clear from each that if there is going to be significant attention paid to international students and

their value and thus recruitment to UP, this attention is going to be on international postgraduate students.

<b>Table 14: UP total (contact) student enrolment and international student enrolment</b>							
<b>Year</b>	<b>Total Students</b>	<b>International students</b>					
		<b>Undergrad</b>	<b>% of total</b>	<b>Postgrad</b>	<b>% of total</b>	<b>Total Int'l students</b>	<b>% of total</b>
<b>1997</b>	26 004	134	0.52	186	0.72	320	1.23
<b>1998</b>	26 684	183	0.69	246	0.92	429	1.61
<b>1999</b>	26 723	254	0.95	347	1.30	601	2.25
<b>2000</b>	28 093	322	1.15	432	1.54	754	2.68
<b>2001</b>	30 272	424	1.40	607	2.01	1 031	3.41
<b>2002</b>	32 163	562	1.75	751	2.33	1 313	4.08
<b>2003</b>	34 196	722	2.11	894	2.61	1 616	4.73
<b>2004</b>	38 963	1 236	3.17	1 003	2.57	2 239	5.75
<b>2005</b>	38 499	1 233	3.20	1 006	2.61	2 239	5.82
<b>2006</b>	38 389	1 339	3.49	1 102	2.87	2 441	6.36

Sources: Total student data from: UP 1994 Annual Report, p. 6 (1989–94 stats); Van der Watt, 2002, p. 356 (1995–96) stats; Office of (BINEB) (1997–2006). International student data from: 1997 Stats from UP, 2001, p. 13 (1997); 1998–2005 stats from UP Bureau for Institutional Research and Planning, Management Information; 2007 stats from UP, 2007a, p. 29.

Table 14 shows that UP's international postgraduate student enrolment has increased from only 0.72% of the total student population in 1997 to about 2.8% in 2006. Whether or not this signals a significant increase is debatable. Also, since UP's undergraduate international student enrolment is currently higher than its international postgraduate student enrolment, the university will have some work to do if it hopes to raise the number and percentage of postgraduate international students, as its strategic ambitions indicate it would like to do.

One of the primary characteristics of the international postgraduate student issue at UP (and in much of South Africa for that matter) is the number of postgraduate students from the African continent, and particularly the Southern African region. As Table 13 above shows, the international postgraduate student complement at UP is dominated by students from the SADC region and other African countries. For instance, in 2006 there were 819 registered postgraduate students from the African continent (462 from SADC and 357 from other African countries) and 283 from countries outside of Africa. This is mirrored in the other years shown in the table as well. This clearly indicates that the majority of South Africa's international students come from the African continent, and demonstrates another area where UP's internationalisation is being engaged with to contribute to continental development, as discussed under the rationales for internationalisation at UP. In this instance, the contribution is being made through the academic training and capacity building of continental citizens who may take their new knowledge and qualifications back to their home countries.

It could be argued that students from the SADC region should not be categorised as international students because policies to which the South African government has committed state that SADC students should be treated as domestic students. This argument would be in keeping with the SADC Protocol on Education and Training (SADC, 19997) which states:

*Member States agree that within ten years from the date of entry into force of this Protocol, they shall treat students from SADC countries as home students for purposes of fees and accommodation (Article 7, No. 5).*

However, during the process of this research (spanning 2005–2008) the treatment of SADC students as home students had yet to be fully realised. For example, when I asked UP stakeholders during my interviews whether SADC students are considered as international students or as domestic students, as the policies claim they should be, I was told on numerous occasions that they are viewed as international students. One UP international student advisor informed me that SADC students are “...international...they are considered international” (I: Pienaar). I also posed the question to one of UP’s executive members:

**Researcher’s question:** *...with regard to the students, and specifically, for instance, the SADC students here at UP, are they considered international students or are they domestic students in principle? Do you have an opinion on that, whether SADC students should be considered international students or not?*

**Answer:** *Well, because of the SADC Protocol, they’re regarded as being in the same category as South African students. But I think that that’s an agreement which the states have made in order to make the flow of students in the region easier. But obviously they’re regarded as international students because they come from outside of South Africa’s borders (I: Crewe).*

The issue around SADC students being considered South African students in principle versus in practice is another area of research that could be further investigated. It also demonstrates one of the areas of contradiction between policy and practice that characterise UP’s internationalisation, which could also be reflected in the larger South African HE context.

In addition to the desire to bring in more international postgraduate students as part of this expression of UP’s internationalisation, there is also some attention being given to South African postgraduate students going abroad for short periods to conduct research and get experience at international venues. This is especially the case in the Faculty of NAS, where many of its centres and departments work actively to send their postgraduate students abroad, particularly through such programmes as the UP Postgraduate Exchange Bursary Programme.

*There is also a programme at the university for postgrad students for short visits abroad. Our faculty, with the contacts we have all over the world, has a vibrant programme for sending some of our PhD students to work for a month or so in a lab of an international expert (I: Ströh).*

According to data gathered from the office that administers this postgraduate bursary programme, Prof. Ströh is correct in stating that his faculty is actively taking advantage of the programme. This is evidenced in the fact that in the years 2004, 2005 and 2006 of the 13, 21 and 17 total awards given to students, over half of those in each year (7, 11 and 9 respectively) went to the Faculty of NAS. Over R970,000 was awarded to postgraduate students through this programme for those three years, and the Faculty of NAS took advantage of this funding by encouraging and supporting its postgraduate students to apply for it. It should also be noted that the Faculty of EDU is taking advantage of this postgraduate bursary programme too as many of its students have applied for and/or been awarded these bursaries to conduct research abroad (including myself in 2005). The participation by postgraduate students in this particular UP bursary programme (and the support given to students to do so by their faculty), underscores the fact that international experience for its postgraduate students, particularly for the purpose of research, is a key expression of internationalisation at UP.

#### **6.2.4 Summarising UP's primary strategic expressions of internationalisation**

The following can be said in summarising the primary expressions of UP's internationalisation discussed in the previous three sections (the current section included). It was clear that these expressions of internationalisation – international partnerships, collaborations and networks; increased international publications; academic researcher mobility (inbound and outbound); and postgraduate student mobility (inbound and outbound) – are strategically the primary expressions of the process at UP. It was also clear that UP had high hopes that these primary strategic expressions of internationalisation would result from, and/or in, more international research activities and outputs on the part of UP and its individual and collective constituents. However, these expressions of internationalisation are marked by contradictions between the intentions to engage in them and how that engagement ultimately unfolds, as the evidence (and lack thereof in many instances) demonstrates. This does not, however, negate the importance of these three expressions strategically to UP, and summarising their relationship can be seen in the evidence presented herein. It is also evident in the following extract from the newest strategic plan (UP, 2007a), which discusses the importance of international collaborations:

*The University of Pretoria moved from being a parochial institution to one that is increasingly recognised internationally. This position has largely been attained through the University's research activities. But, increasingly, research is becoming collaborative, with researchers working in teams, even if the members are spread across the globe. The impact of international collaboration is increasing, making it important to enter into partnerships with suitable institutions across the global. We intend on developing a structured policy on internationalisation to deal with these issues. Partnerships need not only be in terms of research; but may also lead to beneficial staff and student exchanges...Excellent academics may well be willing to teach for a term at an institution such as ours. We intend building these possibilities by offering visiting professorships to excellent academics from other countries. Furthermore, we will encourage members of the University to participate in international editorial and professional boards and panels (p. 32).*

This text shows that each of the three key expressions of internationalisation discussed herein is indeed of strategic importance to the institution. Furthermore, it demonstrates links between the three main expressions of internationalisation and UP's international research and international profile ambitions because they are each seen as part of the path to increasing research output and production.

#### **6.2.5 Less important expressions of internationalisation at UP**

Even given that UP is strategically engaging, and/or hoping to engage, more intensively in the three expressions of internationalisation just discussed, that does not mean that some of the other expressions of internationalisation are not present at the institution. For instance, the importance of mobility of people – including undergraduates, postgraduates, faculty and staff, and postdocs – to UP is evident in the claims that “the University also received 816 visiting researchers and academics. Of which, 311 were from South African institutions and 505 from 57 other countries...” (UP, 2005a, p. 17). In addition, as can be observed in Table 13 earlier in this chapter, UP has increased its numbers of international students almost seven-and-a-half times from 1997 (320 international students) to 2006 (2,441 international students). The upward trend in international student enrolments can be attributed to several factors. These include the opening up of South Africa (and particularly UP) after apartheid, and UP's desire to be an internationally recognised research university. This relates to UP having international students who can bring in new and different sets of knowledge and experiences, which many of the UP stakeholders with whom I spoke commented on.

What is important to note about this increase in international students is the difference in attitude at UP toward undergraduate and postgraduate international students. UP academics, researchers and administrators seem to have a common feeling that postgraduate international students are more crucial to the university than are international undergraduate students,

mainly for the reasons already discussed, but which include UP's significant research ambitions. The following exchange with one of UP's leaders illustrates the point:

**Researcher question:** *On the issue of students, do you see a role for international students in international research engagements?*

**Answer:** *I think we basically believe primarily that at the postdoctoral level it's important. We're kind of looking at bringing international postdocs to South Africa. We're also encouraging our researchers to actually go overseas and do a stint.*

**Researcher question:** *Is there any role for international undergraduate students? Any role period, whether they're coming or going?*

**Answer:** *I think in terms of coming...it would be much more of a marketing exercise...I don't see a major role for the undergraduate students [in research]. But masters and PhDs I do see a role, if we could attract masters and PhD students internationally. Because of the nature of questions that they could [help to] answer... (I: Jeenah).*

This particular UP leader was not the only person who gave the impression that postgraduate international students are more vital to UP than undergraduate students. Another HOD's statement further epitomised the collective thinking of many UP professional researchers:

*...are we talking about undergraduate education, because I think that is very different...at a research, postgraduate level, that is a place where you want to be in the global village definitely and in the sciences, absolutely...(I: Wingfield).*

A further and important illustration of this was in my conversation with another HOD who used the term "upgrading" several times when telling me that they currently have many exchanges of undergraduate students, but that they would like to "upgrade" that to the postgraduate level. To me, this signifies (and personifies) the prevailing thinking of UP academics and leadership that undergraduate exchanges are not seen as being as critical to UP as postgraduate exchanges, mainly because of research. So, again, this shows that not much emphasis or importance is placed on matters such as intercultural or mutual understanding. For example:

*I think the university of Utrecht agreement is a real exchange. It's on an even basis. They come here and we send our students there...But I think that... we should look for a way of really upgrading it. And in fact, that's one of the things we have discussed because at the moment its just at the undergraduate level... there's not much that one can do with that... We would like to see it going to the postgrad level, but at the moment, because we are a young department, what is happening is that it's just at the undergraduate level (I: Onwu).*



I followed up the above discussion by asking the HOD what the role of undergraduate students was:

*Well, they do have a role. As I said, with Utrecht it's on a faculty-wide basis. There are student exchanges at the undergraduate level, but what we want to do is we want to upgrade that to make that higher, you know, because at that level (undergraduate) you're really only visiting the schools and so forth, you're not going to go into research, but in the final analysis what they want is something that will give scholarship, that you can do things together. Of course, we are changing that, because we've now got a focus on undergraduate education because of the incorporation of the college. But that doesn't stop individual departments from seeking the kinds of partnerships that could be established (I: Onwu).*

And a final comment on the issue:

*I think it's always nice to have international diversity with your undergraduates. It's nice at any level, but I think it's crucial at the postgraduate level and at the undergraduate level I think it's less crucial (I: Wingfield).*

So, it is “nice” to have international undergraduate students, but it is “crucial” to have international postgraduate students. Also, the use of terms such as “upgrading” partnerships to include postgraduate student exchanges when they only include undergraduates supports my notion that the latter is not looked upon as significant in the same manner as the former. Owing to these prevailing attitudes at UP, an increase in international undergraduate students as an expression of internationalisation is not as key to UP as is the inflow of international postgraduate students.

Another area of internationalisation that is not a central expression at UP, and which relates to the issue of student mobility already discussed (and which is also evidenced in the few statements discussed above) is study abroad for South African students, and particularly UP's undergraduate students. One international student advisor told me that “management doesn't fund South African students...possibly because they're not thinking about it” (I: Pienaar). When I asked another international student advisor if management supported South African students wanting to study abroad, she told me that there was “...nothing for undergraduates unless we negotiate that with the partner institution directly” (I: Mphahlele).

Although the university does not seem interested in study abroad programmes for its students (particularly undergraduates), the two international student advisors quoted above believe that the students themselves are enthusiastic and interested in such activities.

[Study abroad] is very important but the problem is, we are having one-way traffic of students that are coming this side, and then from our side to send the students is difficult, because with the rand to the dollar it's very difficult. So our students would actually love to go for an exchange outside, but their money only covers for tuition waiving, but with transportation and their living allowance they're on their own (I: Mphahlele).

I had the following exchange with Ms Pienaar:

**Researcher question:** *From a South African student's perspective, based on the amount of inquiries you get, how important is it to them?*

**Answer:** *We never have enough opportunities to get information out to them, or to make them aware of opportunities. I would like to go out on awareness drives. I would like to have seminars or a two-hour session and say, these are the opportunities and this is where you can go and this is how it works. Any time I've had something like that, I get an influx of questions. But it would take two or three of us to be there. And put this information in a newspaper or student magazine or something like that (I: Pienaar).*

When I followed up by asking if students were interested in these opportunities, Ms Pienaar answered with an emphatic yes. However, she added that in her view support from the university as a whole was not always there to allow her office to provide students with the required information and opportunities, particularly at the undergraduate level. Further supporting my claim that undergraduate study abroad for UP students is not a primary issue of concern at UP, is the fact that no records are kept concerning the number of UP students (particularly undergraduates) who study abroad and/or where they are studying. I should, however, mention that one UP vice principal did say that there is some discussion and planning to introduce a bursary programme for undergraduate study abroad in the future. It is yet to be seen whether such a programme will indeed be introduced and how it will be utilised to increase and encourage undergraduate study abroad. In the meantime, this is an area where UP does not seem seriously and actively engaged.

### **6.3 Linking UP's international activity ambitions to its three primary rationales**

The previous three sections have discussed the three primary strategic expressions of internationalisation at UP, as well as some of the less visible expressions of the process. I will now demonstrate more clearly the link between the three primary expressions of internationalisation at UP and the reasons why the institution is internationalising in these manners (i.e. UP's three primary rationales for internationalisation discussed in Chapter 5). It became clear during my research that the three expressions of internationalisation discussed in this chapter were seen by UP stakeholders as the primary means of expression for UP. But they were also significant to the university due to their links to the university's communal

ambition of being an “internationally recognised research university” and thus its strong research ethos. As stated elsewhere, it is this research ethos that UP seems to be placing at the top of its agenda and which is a crucial element of its internationalisation.

Evidence of the relationship between the three primary strategic expressions of internationalisation at UP and their direct link to UP’s research ethos and ambitions can also be seen in the new structure of UP’s international relations office. During the course of my research, the UP executive voted to move the CIR office from under the direction of the executive director charged with institutional advancement and related activities, to the vice principal who oversees the university’s research activities. This also tied the CIR closely with the Office of Research Development and Support, which was also overseen by the same vice principal. Voting to place the CIR under the vice principal in charge of research<sup>14</sup> demonstrates that UP’s leadership sees its internationalisation and its research as intimately linked to one another. It is yet to be seen how this structural move will affect the internationalisation process.

In keeping with its research ambitions, I will now highlight some UP international research activities that seem to impact on its internationalisation rationales of global integration, continental/regional development and/or national development. These practical examples also underscore and support some of the arguments made about the overall developmental potentials of international research and the high premium placed on research by UP for these purposes. Additionally, these examples will demonstrate the active nature of some of UP’s and its faculties’ international agreements with institutions abroad.

Many research projects are being led by individual members of UP’s faculties of EDU and NAS, which demonstrates UP’s and its constituencies’ commitment to the overall research ethos of the university. Many of these research activities have an institutional (local), national, continental and even global impact in that they are addressing problems relevant to the latter three, leading to the training of individual researchers and practitioners across geographic boundaries as well as in South Africa, and at the same time increasing the standing and reputation of the institution itself. Although writing about all of the international research activities at UP and its individual members is not feasible or necessary here, one illustration from the Faculty of EDU and one from the Faculty of NAS should help to

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<sup>14</sup> At the time of this study Prof. Robin Crewe was the vice principal in charge of research. Coincidentally he is also the president of the Academy of Science of South Africa (ASSA), adding further evidence of the desire to link international relations tightly to research. The ASSA is one of South Africa’s primary organisations supporting and encouraging research as a vital part of the country’s development.

demonstrate the type of research undertaken at UP, and what difference it can make nationally, continentally and internationally.

### **6.3.1 Examples of UP's (international) research activities: Faculty of EDU**

One useful example from Faculty of EDU research on an international level that illustrates the local, national, regional and global developmental potentials of such activities can be found in the alternative and augmentative communication research led by the director of the faculty's Centre for Augmentative and Alternative Communication (CAAC). The CAAC's motto is: "Not being able to speak does not mean you have nothing to say". Its research and training seeks to provide new knowledge and platforms to help individuals who cannot speak clearly, or at all, to be able to communicate, as well as to help those who interact with such individuals to be able to do so effectively.

The CAAC's activities and strategies include a wide assortment of communication methods ranging from gestures and communication boards to assistive communication devices. According to its website, the CAAC:

*...is committed to making a difference in the communication and life-skills of people with severe disabilities, and in particular those with complex communication needs, by:*

- *Multi-professional and community training*
- *Research in the fields of severe disabilities, early childhood intervention and augmentative and alternative communication*
- *Influencing policy making impacting on the lives of people with severe disabilities. (www.caac.up.ac.za/index.htm).*

In terms of the scope of the problem of communication nationally, continentally and globally, according to the CAAC:

*Internationally [inclusive of Africa] it is estimated that 1,5-2% of the general school population is in need of AAC services. In addition, it is known that approximately 20% of all people with little or no functional speech is cognitively within normal limits. In South Africa the prevalence of little or no functional speech (LNFS) seems much higher than in other Western countries: A study within the greater Pretoria, for example, showed that 39% of all children in schools for children with severe disabilities could be regarded as having LNFS (http://www.caac.up.ac.za/what\_aac.htm).*

These numbers show the need for the CAAC's work and thus the problems which it intends to address through its research and training. The centre's research, which is guided and led nationally by a South African researcher, impacts not only South Africans but also other Africans and globally. The CAAC's research leads to the development of communication

techniques, strategies and programmes that allow young people particularly, who cannot communicate effectively or at all to be understood by those around them. CAAC developments have included cost-efficient low-technology tools such as communication boards for use in contexts of poverty and underdevelopment in which many young people in South Africa, the continent and the world live. Additionally, the CAAC's research has led to the development of computer-based assistive devices that rely on the movement of a person's head, hand or eyes to select icons on a computer screen that he/she can use to connect to the speaking world (UP, 2006b, pp. 55–56).

Although there are many difficulties with some of this technology – such as the issue of access to technology and trained therapists in the most vulnerable and needy places – the CAAC is continuously conducting research and developing communication packages that are simpler to use and which use situations and issues from South African, African and other developing country contexts. Doing so makes training and communication opportunities available for those who would not otherwise be able to utilise such opportunities. According to the centre's director:

*...we are basically helping people find a way to communicate. And that's from low-tech like picture boards that a kid can look at to high-tech software and technology. So we do the whole range...And we're the only training centre of its kind in Africa... (I: CAAC HOD).*

In addressing the communication issues of individuals with disabilities, the CAAC has national, continental and global reach, which can be illustrated by looking at one of its projects, the Fofa project. Fofa, which means “fly” in Northern Sotho, is an international research collaboration with Temple University in the US. The Fofa project was launched in 2005 to develop opportunities and strategies to identify young adults who have the potential to become employed after they have successfully acquired strategies to communicate, and to train them (and their employers) to be able to communicate and find employment. Specifically, the project includes training for individuals with communication difficulties as well as support systems to explore the labour market more aggressively and to become advocates for people with disabilities. During the week-long programme, the participants receive intensive training in life skills, employment and empowerment issues, planning for the future and various augmentative and alternative communication strategies.

On a national level, the Fofa project aims to address the need for young South African adults with severe disabilities, including communication problems, to be able to enter the labour

market, and to provide them with the communication ability to do just that and to interact on a personal, social and vocational level. On a continental level, some of the project's strategies and findings could be expanded to other countries in the region and continent with similar issues. Additionally, on a continental level, the CAAC's research and training in general is significant as it is the only centre on the continent that is dedicated solely to research and training in the field of augmentative and alternative communication intervention strategies for people with severe disabilities. The centre's activities allow it to share information and practices with institutions throughout the African continent. Additionally, the centre's training is being offered to individuals around Africa, and many of its materials and techniques are thus relevant and useful in other developing countries in Africa. Regarding global impact, since the Fofa project is a joint programme between a South African and a non-South African HEI, the techniques and knowledge being developed are shared with researchers and practitioners across boundaries.

Overall, the CAAC's research and its training of individuals is developing assistive communication technologies and strategies that will help not only individuals with communication difficulties overcome these difficulties, but also with those who might employ and/or interact with them on a daily basis, providing assistance on how to treat and communicate with such individuals, and how to utilise their services more effectively. In 2005, the CAAC trained nearly 6,400 individuals to use alternative and augmentative communication, and reached over 8,000 children, youth and adults (UP, 2006b, p. 56). Clearly, from the type of research and training activities it engages in, the CAAC serves as a solid example of how the Faculty of EDU (to which it belongs) supports and contributes to the overall strong research ethos at UP. I will return to this issue of research, and specifically the international nature of it, shortly; however, an illustration from the Faculty of NAS and its research ethos is also in order.

### **6.3.2 Examples of UP's (international) research activities: Faculty of NAS**

Like the Faculty of EDU, the Faculty of NAS buys into the importance of research and particularly international collaborative research that emanates across the UP environment. The research being done in the Faculty of NAS, led mainly by individual professional researchers, also has local, national, regional and global significance. A prime example is research on water resource management. As water is a global resource, such issues as exposure to unsafe drinking water, water-borne diseases such as cholera, and the use of water for farming and irrigation, impact individuals the world over. Finding effective ways to



manage water and deal with such issues is thus of primary concern to professional researchers throughout the world, including those at UP.

As such, research being led by UP professional researchers such as Prof. Eugene Cloete, head of UP's Microbiology Department and chair of the School of Biological Sciences, and who also serves as the co-leader of the Southern Education and Research Alliance (SERA) Water Task Team, demonstrates the institution's commitment to research and particularly to the issue of water management. The 2005 UP Research Report states that the budget for the university's Water Resource Management programmes was R4.5 million, involving 16 researchers, 31 students and producing 11 publications (UP, 2005b, p. 41). Along with Prof. Cloete, these individual professional researchers and students worked together to address many of the national, regional and global issues related to water management, which were highlighted earlier.

Additionally, under the leadership of individuals like Prof. Cloete, SERA has facilitated an international collaborative alliance between UP and the Georgia Institute of Technology (Georgia Tech) in the US to establish an interdisciplinary graduate education and technology transfer institute. The institute aims to support the sustained development of African engineers and scientists to address global and African challenges in natural and energy resources, economic development, climate variability and change, food security and public health (SERA 2006). The new institute is a collaborative effort that produces research and trains individuals from the participating countries in water and energy resource management. It is particularly concerned with increasing the number of trained individuals on the African continent, because, according to SERA, African countries have on average only 18 scientists and engineers per million people, compared to 69 in southern Asia, 273 in Latin America and 903 in eastern Asia. SERA seeks to change these statistics by building on the experiences of the institutions involved. In collaboration with the Centre for Environmental Studies at UP, the institution offers masters and doctoral degrees in Water Resources Management, and has graduated over 40 students in the past five years (ibid).

The research and activities coming from these research collaborations are having a global impact because they are addressing the global issues of water and energy resource management. Continentally, although the institute began as a partnership between a South African and a US university, there are plans for it to expand to other African nations as well, in an attempt to train individuals and build research capacity throughout the continent.

Finally, on a local level, the research and activities of the institute are reaching individual graduate students helping to train them, as well as producing research that can be used to support water and energy resource management throughout South Africa. SERA is also trying to make its expertise and research available through distance education methods, to reach an even larger population.

According to SERA: “With the establishment of the new Institute, will come a lasting mechanism for the continuous development of technical professionals, facilitated by the provision of valuable services, the generation of new knowledge and the creation of human resources needed for government agencies, regional and national water resources centres, industry and academia” (ibid). These are methods in which the UP research agenda – and particularly the international collaborations part of that agenda – is having an impact. Since this impact is being felt on the national, regional and global levels, the UP professional researchers involved are providing the university with recognition and standing vis-à-vis the type of professional researchers it produces and employs.

#### **6.4 Further on UP’s international activities and their developmental impacts**

As the two previous sections attempt to show, UP’s international activities are tied strongly to its research ethos, and such activities have an impact locally, nationally, regionally and globally. In addition to examples such as these, the activities of individual UP professional researchers seem to be what the institution is banking on to reach the earlier mentioned goals of being an “internationally recognised research university” and “globally competitive and internationally relevant”. This is evident in the answers (some featured below) given to my question: how do UP’s international activities make it both globally competitive and at the same time nationally relevant?

*...globally competitive relates to the fact that we publish in the best journals internationally, and have top researchers that are contributing to world knowledge (I: Jeenah).*

*Mainly through individual people...the fact that several of our faculty now take leadership roles in international organisations. So, I think you’ll find a whole lot of people as individuals beginning to play leadership roles in international professional organisations and academic ones that we didn’t have before (I: Jansen).*

*We’ve published more and more overseas. Some of our staff members have won scholarships from overseas...So people are getting more and more genuine invitations to read and present papers internationally...So that just gives you a picture of the increased activities and how they have intensified (I: Beckmann).*

*Yes, again, we leave it up to the individual. Like in our case...what does happen is mostly people driven (I: Beckmann).*

Another illustration was given to me by Prof. Cloete when we discussed the nature of research being done in his faculty and what, if any, global and local impacts it was having:

*As an example, there is a group that is producing a local fermentation called PING, which is very relevant and popular in the Northern Province. We've isolated the bacterium that produces it and we've improved it and checked the quality of this product so that we can use it and do something that people like. And that, we did with molecular biology, but the practical thing was we can actually use this product for people in rural areas. And out of this, we can develop a whole commercial industry which will provide jobs and which will stimulate the economy in that particular environment. So this comes as local relevance. We would start with the initial knowledge and we would publish that in an international journal, not in a local journal, even though it is a problem that is very localised. But the technology there is equivalent to production that is done elsewhere and the techniques that we used to identify the organisms are clearly advanced and can be used elsewhere (I: Cloete).*

I then asked for more elaboration on the global reach of such national research being done at UP:

*...the outcomes of that have interested people all over the world that started with a very localised product. It's the same with the water supply. We've developed techniques that are used here that have relevance internationally and especially in the rest of the developing world. Same with South America. I mean there might be someone there that has a product that's never been commercialised and this [what UP has done] might give them some indication of how you actually go about standardising the product and commercialising their local product for the global society, as well as producing it on a larger scale for that particular country or region (I: Cloete).*

When I asked about “personal” international activities, I received an interesting answer that sums up the “collective individualism” mindset among the professional researchers in departments within the Faculty of NAS:

*My professional activities are tied in with the activities of the Centre for Environmental Studies. It's not personal activities as such. They are all professional in nature and thus tied to the centre and the faculty. So, it's hard to draw a distinction between what my professional activities are and those of the centre. They go hand in hand (I: Ferguson).*

Comments such as those highlighted above present examples of how UP researchers are engaged in international research activities that not only impact upon them and their faculties and UP, but also on the international networks. These take the form of involvements with global or regional networks working together to network and address issues of global concern, while also allowing the UP researcher to build relationships and knowledge that may

assist him/her with addressing problems directly relevant to South Africa. The point to be made is that international research partnerships and activities can and do have a local, national and global impact.

## **6.5 Synthesis**

It can be seen from the evidence presented here that UP has specific strategies and ambitions concerning its internationalisation and how it hopes to engage practically with the process. These ambitions are part of its overall transformation agenda, and the university hopes to express its internationalisation primarily through activities that will enhance its pursuit of an international research agenda which will contribute to it being globally competitive and nationally relevant. The path to this international research agenda takes the strategic form of the three primary expressions of internationalisation discussed in this chapter, namely: international collaborations, networks and partnerships; faculty and researcher international mobility; and postgraduate student mobility.

Thus, the very nature of UP's strategic approach to these expressions of internationalisation – and the increased intensity with which it hopes to engage in these expressions – supports the notion that internationalisation, as defined herein, is a process that is unfolding at UP. Although the pursuit of the internationalisation objectives is not an uncontested, non-contradictory process at the university, there does seem to be consensus among the stakeholders that internationalisation, and particularly international research activities, are key and that the three primary expressions of internationalisation discussed herein are going to help achieve those ends.

However, given the inconsistencies in the evidence of UP's internationalisation expressions presented in this chapter (e.g. UP's relatively low percentage of international postgraduate students in relation to the desired increase in that percentage), one can conclude that the university is still in the beginning to middle stages of its internationalisation process. The lack of available evidence of its internationalisation, primarily due to inadequate systems for tracking and reporting on the international activities of its faculties, researchers and students, also supports this argument concerning the level of internationalisation at UP. Nevertheless, UP believes that the international research collaborations of its faculties – and more specifically its individual researchers, which support and/or lead to international research activities and outputs – will ultimately lead to its communal ambitions of being an internationally recognised research university that is nationally relevant and globally

competitive. The dilemmas, contradictions and inconsistencies between its internationalisation ambitions and its internationalisation in practice form part of the overall analysis of my data, which is where I now turn.