

Section D

THE CONTRIBUTION OF GOVERNMENT-
INCENTIVISED PARTNERSHIP PROJECTS

RESEARCH NETWORKS

One of the indicators of the development of 'Mode 2' knowledge, is the extent to which knowledge production is transdisciplinary, rather than multidisciplinary in nature (Gibbons et al 1994). This section aims to raise questions about the potential transdisciplinary interaction in THRIP and Innovation Fund projects, by reviewing the number of different academic departments involved in partnership projects and by reviewing the number of different institutions involved in partnerships projects.

It must be noted, however, that departments working together do not necessarily reflect transdisciplinary activities. As such, this section represents an attempt to raise questions about the extent and direction of the disciplinary links that exist.

10.1 NUMBER OF DEPARTMENTS INVOLVED IN PROJECTS

Out of a total of 38 higher education institutions,²⁵ 389 different departments are involved in THRIP and Innovation Fund partnerships or projects.²⁶ A total of 16 institutions (42%) have only one department involved in projects; 26% have at least 2 to 5 departments involved; 18% have between 6 and 10 departments involved, 3% have between 11 and 20 departments involved and 4 institutions (11%) have between 20 and 40 different departments involved in THRIP and Innovation Fund projects. Overall, 58% have more than one department involved, indicating high levels of involvement across departments (and therefore across disciplines) (Fig 82).

A total of 52% of the projects are attached to only one department. 48%, however, are attached to more than one department with 23% linked to 2 departments; 20% linked to between 3 and 5 departments and 3% linked to between 6 and 10 departments (Fig 83).

²⁵ This analysis is based on HEIs that are both primary and auxiliary beneficiaries, in that they are the primary grant holder of the THRIP/Innovation Fund project as well as involved in research projects for which they are not the grant holder. Please note that this analysis undercounts the Innovation Fund team members that were not located at the grant-holders' institution as this information was not available.

²⁶ Note that this analysis was taken off ALL the institutions involved, not only the primary institutions, and includes those involved as part of research teams.

10.2 NUMBER OF DEPARTMENTS BY THE THREE TECHNOLOGICAL BANDS

A total of 53% of projects in the field of biotechnology are linked to two or more departments; 47% are linked to only one department (Fig 84a). The ICT field shows a similar distribution, with a slightly lower percentage (49%) of projects linked to two or more departments and 51% linked to only one department (Fig 84b). A different distribution is evident for new materials development, where the majority of projects (68%) are linked with only one department and 32% with two or more departments (Fig 84c). These findings suggest that new materials development appears to be more specialised whilst ICT and biotechnology appear, in terms of working with other disciplines, to be more cross-cutting.

These figures are suggestive of potential transdisciplinary co-operation on THRIP projects.

Figure 82: Number of departments by institution

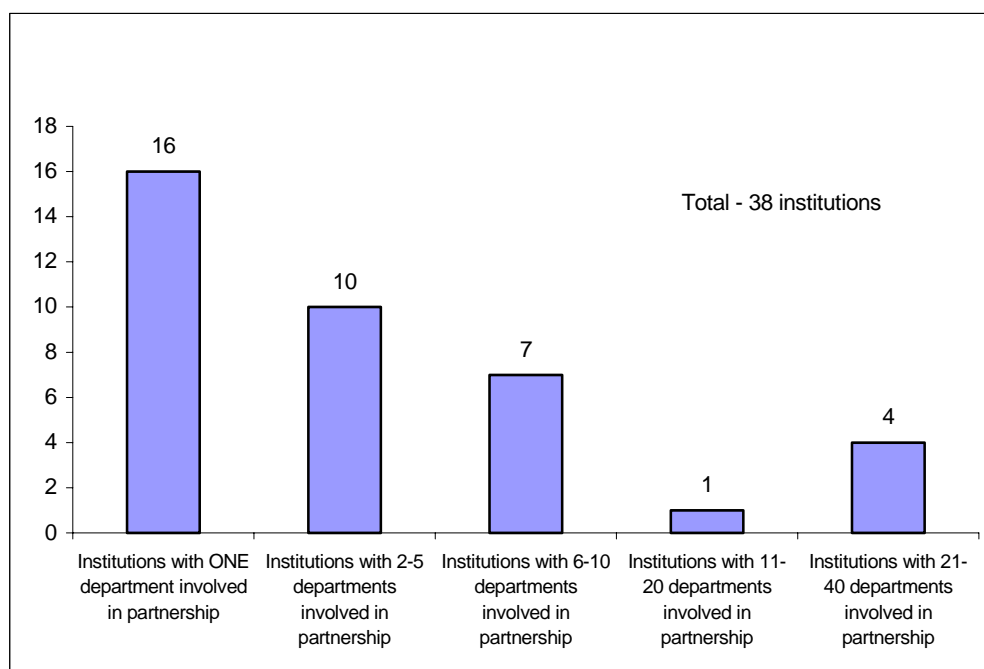


Figure 83: Total number of departments per project²⁷

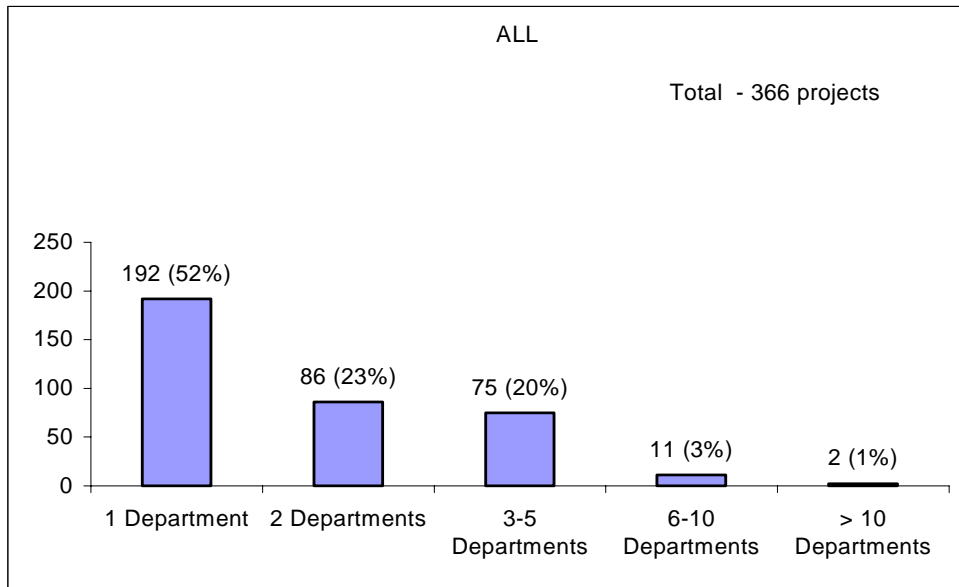
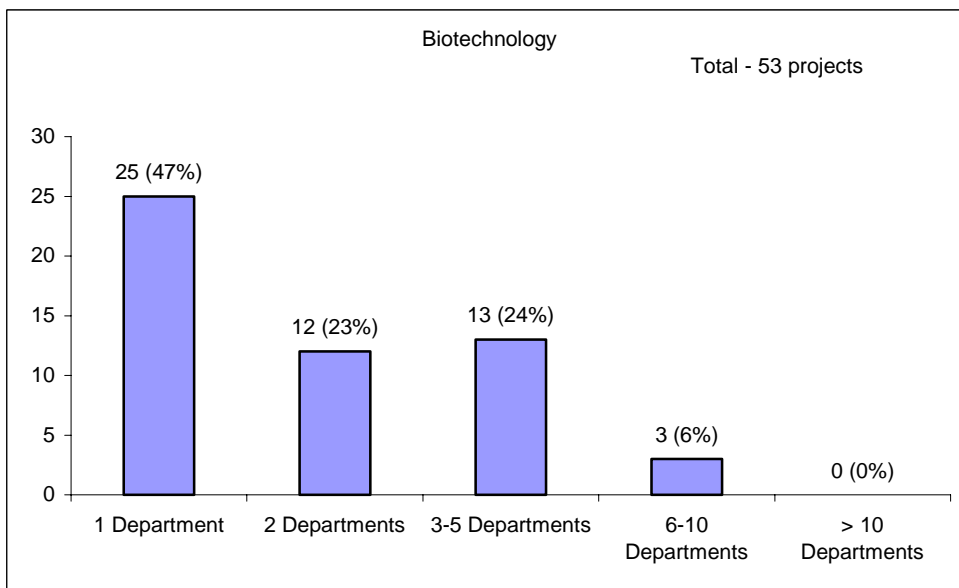


Figure 84a: Total number of departments per project in biotechnology



²⁷ Note that the analysis here refers only to THRIP projects.

Figure 84b: Total number of departments per project in ICT

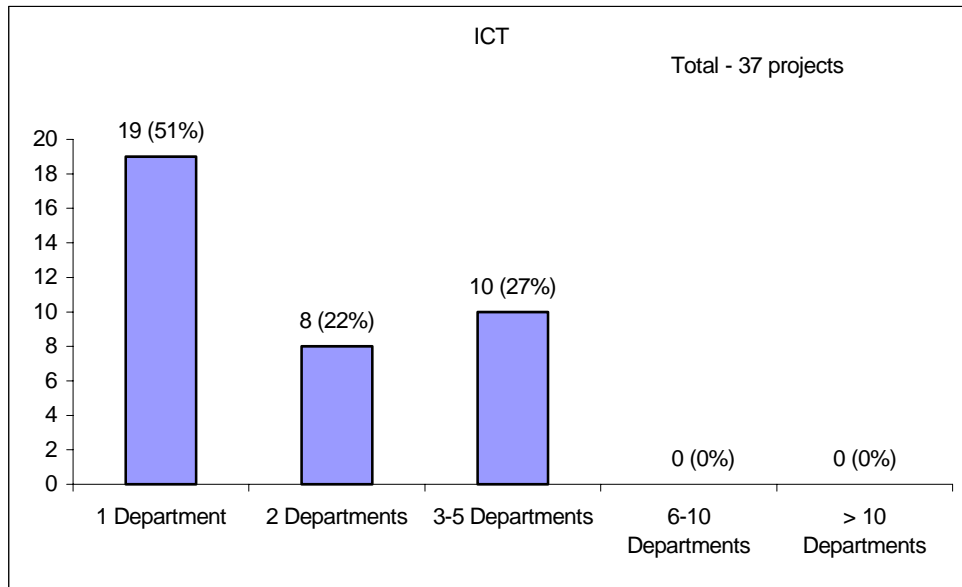
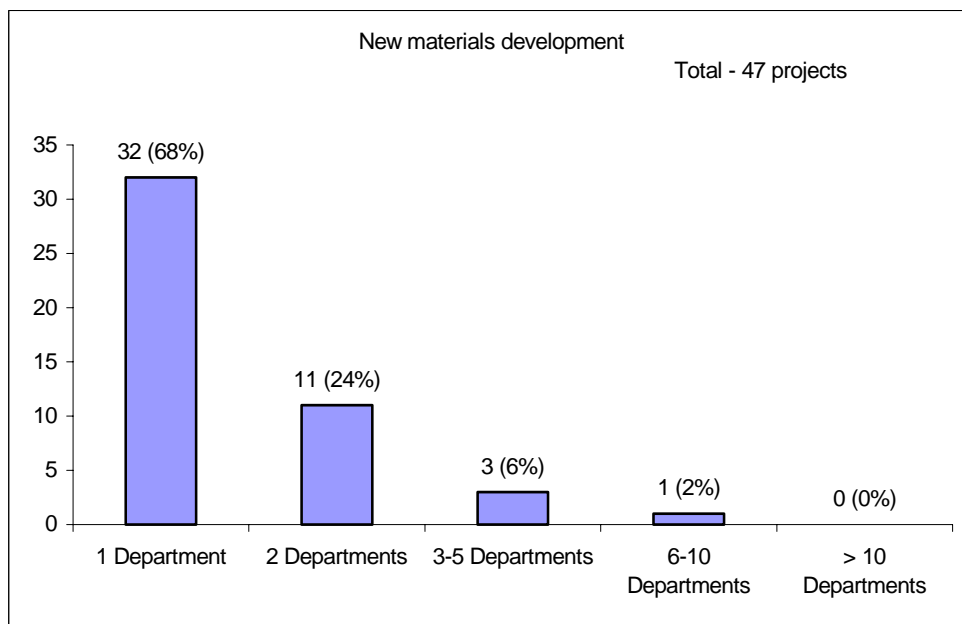


Figure 84c: Total number of departments per project in new materials development



10.3 INSTITUTIONAL LINKAGES

This section, building on the previous analysis, reviews the extent to which grant holders (primary beneficiaries) are working with researchers in departments and institutions other than their own. It does so in an attempt to further illustrate the number of links existing. It is important to note that linkages between researchers, institutions and departments are complex and interwoven. Whilst this section portrays

some of these linkages in as simplified a manner as possible, in many ways, it does so at the cost of showing the real complexity that exists.

These linkages are worth further and more in-depth study and analysis. The space and time of this study does not permit a more elaborate analysis. Nonetheless, it is clear that THRIP and Innovation Fund partnerships have enabled a myriad of networks between researchers, departments, institutions and industrial enterprises to emerge.

Table 5 refers to the researcher links within a department (i.e. between different individuals within a department), between different departments in the same institution and between different institutions. It shows that grant holders have a total of 312 links to other researchers. Of these total links, 157 (50%) are researchers in their own department; 80 (26%) are researchers in departments other than their own but in the same institution and 75 (24%) are researchers at different institutions. This shows that a total of 76% of the researcher links are in their own institution, and 24% in different institutions (Table 5a).

A similar distribution exists for all three technological bands. A review of biotechnology (Table 5b) shows, for example, that grant holders have a total of 25 (51%) researcher links within their own departments, 12 (24%) are researchers in departments other than their own but in the same institution and 12 (24%) are researchers at different institutions.

These findings suggest that a myriad of linkages have been formed but that these have, for the most part, been quite uneven with 76% of these links remaining in the researchers' own institution.

Table 5: Total departmental links by grant holder/primary beneficiary's department in THRIP projects²⁸

Table 5a: For all projects

	No links	Links	Missing	Total
Own department	96	157	18	271
Other department	164	80	27	271
Other institution	167	75	29	271
TOTAL	427	312	74	813

Table 5b: For projects in biotechnology

	No links	Links	Missing	Total
Own department	10	25	1	36
Other department	21	12	3	36
Other institution	22	12	2	36
TOTAL	53	49	6	108

Table 5c: For projects in ICT

	No links	Links	Missing	Total
Own department	9	17	2	28
Other department	17	8	3	28
Other institution	17	8	3	28
TOTAL	43	33	8	84

Table 5d: For projects in new materials development

	No links	Links	Missing	Total
Own department	14	20	3	37
Other department	25	9	3	37
Other institution	25	6	6	37
TOTAL	64	35	12	111

Table 6²⁹ provides an analysis of directional researcher links. These links are considered '*directional*' in that it shows the number of links that grant-holder institutions have with other research institutions. As such, the *direction* of the analysis flows from the grant-holding institution outward. On the horizontal axis of this table is a list of grant-holder institutions and on the vertical axis a list of researcher institutions. The table is a subset of a bigger table and excludes weak linkages between grant-holder institutions and research institutions.

²⁸ Table 5 is based on only THRIP data. It totals 271 rather than 366 as in some cases departmental data was missing.

²⁹ The full analysis is indexed in Table 10 in Appendix E.

Table 6: Directional relationships between HEIs/SETIs

	UNIVERSITY OF STELLENBOSCH	UNIVERSITY OF CAPE TOWN	UNIVERSITY OF PRETORIA	UNIVERSITY OF THE WITWATERSRAND	POTCHEFSTROOM UNIVERSITY FOR CHE	UNIVERSITY OF NATAL Dbn.	ARC - Stellenbosch	CSIR - MININGTEK	UNIVERSITY OF THE WESTERN CAPE	UNIVERSITY OF THE FREE STATE	CSIR - FOODTEK	RHODES UNIVERSITY	CAPE TECHNIKON	CSIR - ENVIRONTEK	RAND AFRIKAANS UNIVERSITY	TECHNIKON PRETORIA	PORT ELIZABETH TECHNIKON	UNIVERSITY OF NATAL Pmb.	TECHNIKON NATAL	UNIVERSITY OF DURBAN-WESTVILLE	ML SULTAN TECHNIKON	UNIVERSITY OF PORT ELIZABETH	MEDICAL RESEARCH COUNCIL	TECHNIKON WITWATERSRAND	Total excluding researchers at own institution	Grand total	
UNIVERSITY OF STELLENBOSCH	165	6	2			2	5	3	3					1									12	34	199		
UNIVERSITY OF CAPE TOWN	4	124		1		1						1	1								1		1		10	134	
UNIVERSITY OF PRETORIA			99					14						2											17	116	
UNIVERSITY OF THE WITWATERSRAND		7	3	87				8	1															1	20	107	
POTCHEFSTROOM UNIVERSITY FOR CHE					62		1	2						1											4	66	
UNIVERSITY OF NATAL Dbn.			1			38								1	2					3					7	45	
ARC - Stellenbosch	4						20	7	4							1								1	18	38	
CSIR - MININGTEK								29					1												1	30	
UNIVERSITY OF THE WESTERN CAPE							2		20															2	4	24	
UNIVERSITY OF THE FREE STATE			1						3	15															5	20	
CSIR - FOODTEK			2									16													2	18	
RHODES UNIVERSITY					1	3					1	12													6	18	
CAPE TECHNIKON	13												4												13	17	
CSIR - ENVIRONTEK								7						8											7	15	
RAND AFRIKAANS UNIVERSITY		1	1					1							11										3	14	
TECHNIKON PRETORIA	1															13									1	14	
PORT ELIZABETH TECHNIKON																2	11								2	13	
UNIVERSITY OF NATAL Pmb.				1			5											6		1					7	13	
TECHNIKON NATAL						1													9	1					2	11	
UNIVERSITY OF DURBAN-WESTVILLE						5														5					5	10	
ML SULTAN TECHNIKON						3															5				4	9	
UNIVERSITY OF PORT ELIZABETH	1	1		1																		5			3	8	
MEDICAL RESEARCH COUNCIL			1				1		1														3		3	6	
TECHNIKON WITWATERSRAND		1		1	1										1										2	4	6
BORDER TECHNIKON								5																		5	5
TECHNIKON FREE STATE	1																									1	5
TECHNIKON NORTHERN GAUTENG						1																				1	5
CSIR - AEROTEK						1																				1	4
ARC - Roodeplaat			3																							3	3
ARC - PPRI	1		1			1																				3	3
CSIR	1											2														3	3
MINTEK								2													1					3	3
UNIVERSITY OF THE NORTH	1		2																							3	3
VAAL TRIANGLE TECHNIKON				1	2																					3	3
CSIR - MATTEK						1																				2	2
TECHNIKON MANGOSUTH						2																				2	2
UNIVERSITY OF FORT HARE						1																				2	2
UNIVERSITY OF SYDNEY	1	1																								2	2
(blank)	22	6	16	6	9	2		24				3		1	1	1	9		2	5						107	
Total excluding researchers at own institution	28	17	17	5	4	22	9	57	9	0	1	3	2	5	5	1	0	0	0	2	5	0	17	0		996	
Grand total	216	147	134	98	76	64	30	112	29	16	17	18	6	16	17	15	20	7	11	13	10	5	20	2		1117	

Table 6 shows that CSIR-Miningtek, in instances where they function as the primary institution or grant holder, is dominant in establishing research networks with researchers elsewhere. In total they have research links with 57 researchers outside of CSIR-Miningtek. These research links are in 11 HEIs/SETIs. The researchers are from the following South African universities: University of Stellenbosch, University of Pretoria, University of the Witwatersrand, Free State University, University of Natal, RAU and Potchefstroom University for CHE. International universities include Louisiana State University. Only one technikon is involved with CSIR-Miningtek, i.e. Border Technikon.

The University of Stellenbosch is second dominant and in instances where they function as the primary institution or grant holders, they have research links to 28 researchers. These researchers are located at ten different institutions. The researchers are from the following South African universities: The University of Cape Town, the University of Port Elizabeth and the University of the North. International universities include the University of Sydney. Technikons include Cape Technikon, Technikon Pretoria and Free State Technikon. There are also links to researchers at Elsenburg Agricultural College.

The University of Pretoria is third dominant in that it has 17 researcher links at other institutions. These research links are in ten HEIs/SETIs. The researchers are from the following South African universities: University of Stellenbosch, University of the Witwatersrand and the Free State University, RAU, University of the North and the University of Natal. No international universities or technikons are involved in these links.

This analysis could continue for all the remaining institutions reflected in Table 6. The analysis provides an example of how such networks can be disaggregated and how the data in Table 6 should be interpreted and understood.

The University of Stellenbosch is dominant as an institution included as a research link in instances where other institutions function as the primary institution or grant holders. They have 34 auxiliary researcher links (these exclude cases where researchers operate as auxiliaries on projects where the University of Stellenbosch is the primary grant holder). These researchers work on projects at eight grant-holder institutions. The grant-holder institutions include the following HE institutions: The University of Cape Town, the University of Pretoria, the University of Natal and the University of the Western Cape.

The University of the Witwatersrand is second dominant as an institution included as a research link in instances where other institutions function as the primary institution or grant holders. They have 20 auxiliary researcher links (these exclude cases where researchers operate as auxiliaries on projects where the University of Witwatersrand is the primary grant holder). These researchers work on projects at five grant-holder institutions. The grant-holder institutions include the following HE institutions: The

University of Cape Town, the University of Pretoria and University of the Western Cape.

Again, this analysis could continue for all the remaining institutions reflected in Table 6. The analysis provides an example of how such networks can be disaggregated and how the data in Table 6 can be interpreted and understood.

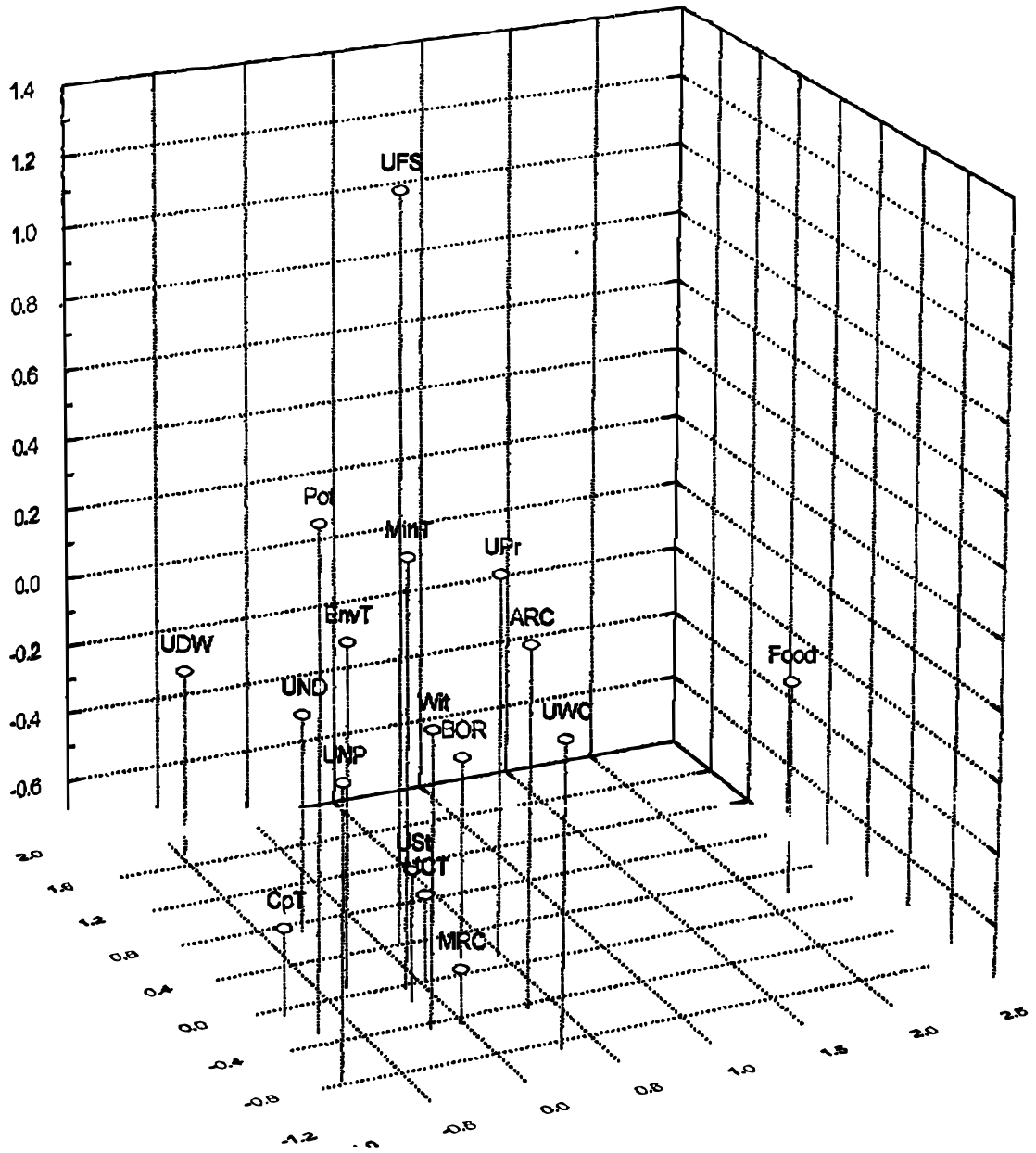
Table 7 represents non-directional researcher links between institutions. In this regard, Table 7 differs from Table 6. While Table 6 provides an analysis of '*directional*' researcher links in that it shows the number of links that grant-holder institutions have with other research institutions, Table 7 provides an analysis of all links between institutions. This means that it looks at which institutions are linked together based on a 'similarity matrix'. Unlike the findings presented in Table 6, this analysis does not move directionally from the grant holder, but rather simply focuses on linking institutions that have worked together on THRIP and/or IF partnerships. Such matrices are based on the assumption that institutions that are the most similar are the most likely to be linked. Whilst this figure is difficult to read, it cannot be mapped on two dimensions, as the relationships represented in this manner show too many linkages resulting in a visually messy spaghetti that, besides highlighting the density of networks and their complexity, remains for the most part quite unreadable.

According to the figure then, Mintek and the University of Stellenbosch are dominant in terms of linkages between themselves and other organisations. All of the organisations close to Mintek indicate a similarity to Mintek and those further away from Mintek, less similar. Those institutions close to Mintek include the University of Pretoria, University of the Witwatersrand, Agricultural Research Council (ARC), CSIR-Environtek, Border Technikon and the University of Natal (Pietermaritzburg).

The University of Stellenbosch, on the other hand, is grouped closely to the Medical Research Council (MRC), University of Cape Town, the University of the Western Cape and Cape Technikon.

Those institutions on the periphery of the figure (i.e. lying outside of the 'similarity groupings' and therefore having few strong linkages to other institutions) include the University of Durban-Westville, the University of the Free State and CSIR-Foodtek (now called CSIR-Bio/Chemtek).

Table 7: Non-directional relationships between HEIs/SETIs



CONCLUSION

This section merely provides a taste of the kind of statistical analysis of networks and linkages that can be undertaken and the value of the findings that could result. The analysis presented here suggests complex and interwoven networks existing in the partnerships funded by THRIP and the Innovation Fund. These would benefit from more in-depth study.

THE OUTPUTS

The outputs presented in this section were determined from the THRIP database and from the surveys of higher education beneficiaries of IF projects. The survey results were weighted in order that the totals provided in this section may approximate as closely as possible the reality.

In terms of THRIP and Innovation Fund partnership projects in the three technological areas, the total outputs are 8% (202) for products or artefacts; 4% (93) take the form of patents/artefacts; 36% (885) are research publications and 52% (1,293) of the outputs were students involved to gain experience in one of the three bands (Fig 85a and b). A comparison of the outputs produced by projects funded by THRIP and Innovation Fund outputs is provided in Figure 85b. It shows that while THRIP has more students involved and more publications, IF partnership projects have resulted in more patents.

Figure 85a: The outputs for all partnership projects in the three technological bands by THRIP and IF

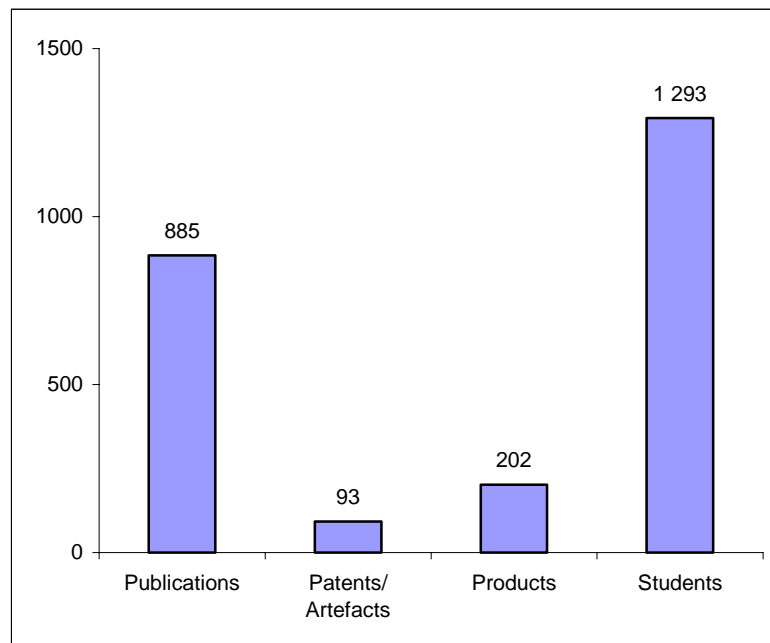
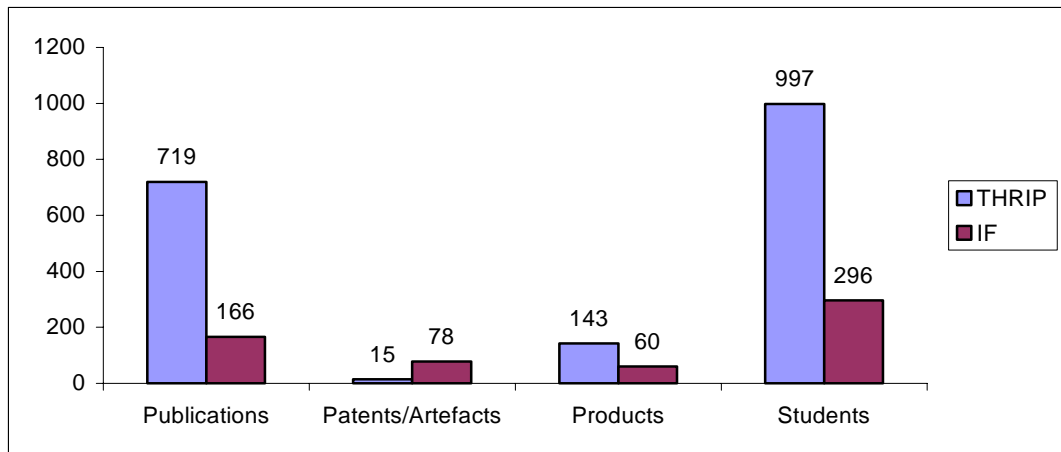


Figure 85b: The outputs for all partnership projects in the three technological bands for THRIP and IF



11.1 OUTPUTS BY TECHNOLOGICAL BAND

In the field of biotechnology (Figure 86a), the greatest output (61% of the total outputs) is that of student involvement. A further 34% of the outputs are research publications, 3.3% products or artefacts and 1% patents.

Outputs in the field of ICT show a similar distribution to the outputs for biotechnology. 52% of the outputs relate to student placements, 37% are research publications, 9.7% are products and artefacts and 1% are patents (Fig 86b). The outputs for new materials development also follow a similar distribution, the only exception being a marked increase in the total number of patents. In new materials development, 69 patents are produced.

The distribution of THRIP's TIPTOP candidates (see the section on THRIP's funding options for more detail) across the three bands is such that 45% of the candidates are placed in projects not within the three fields discussed here. 27% of the candidates are placed in the field of ICT, 22% in the field of new materials development and only 6% in the field of biotechnology (Fig 87).

Figure 86a: The outputs in biotechnology³⁰

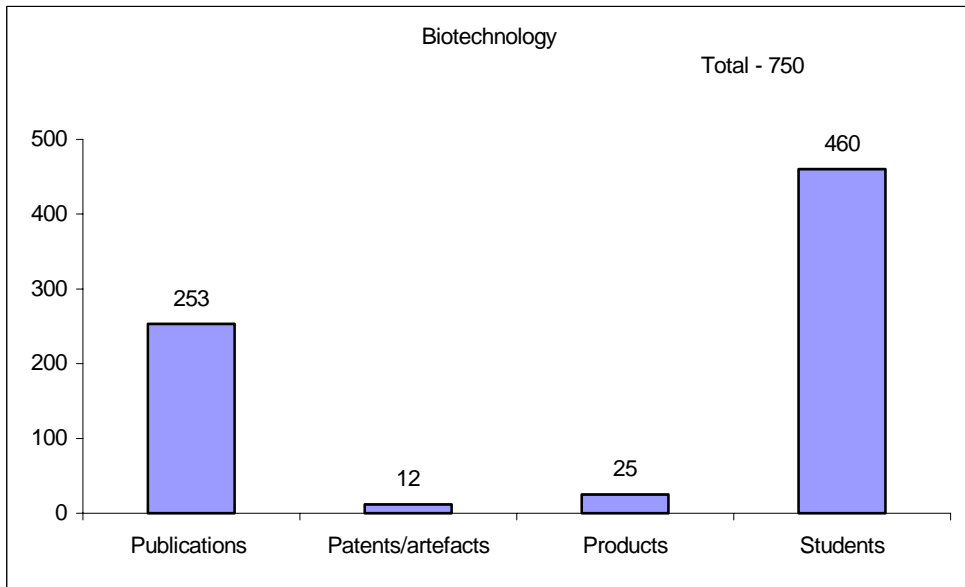
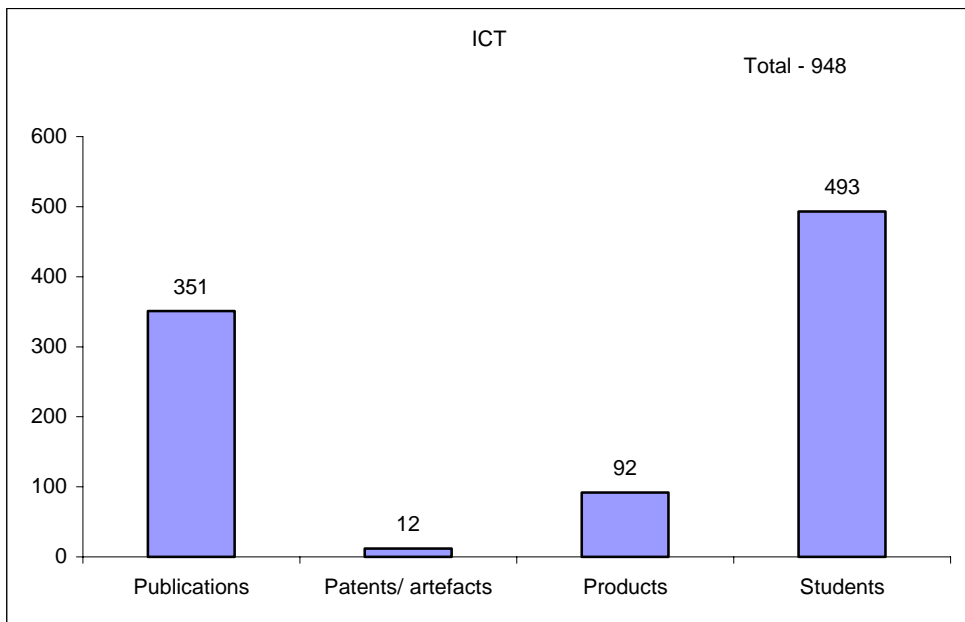


Figure 86b: The outputs in ICT³⁰



³⁰ Note that the totals provided in this graph, particularly for Innovation Fund totals, may not (due to differences in the weightings applied for the total population and for each subfield), equal that provided in Figure 85b.

Figure 86c: The outputs in new materials development³⁰

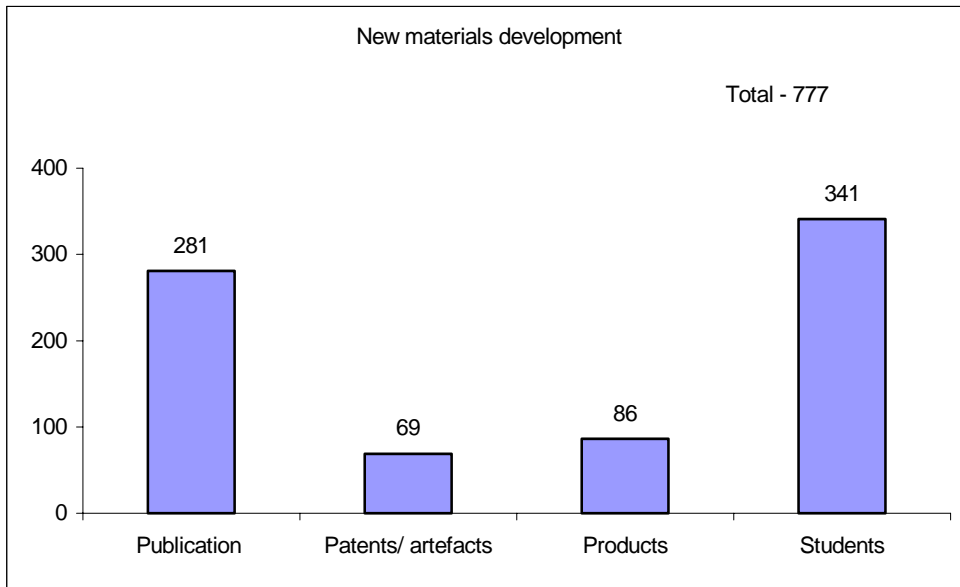
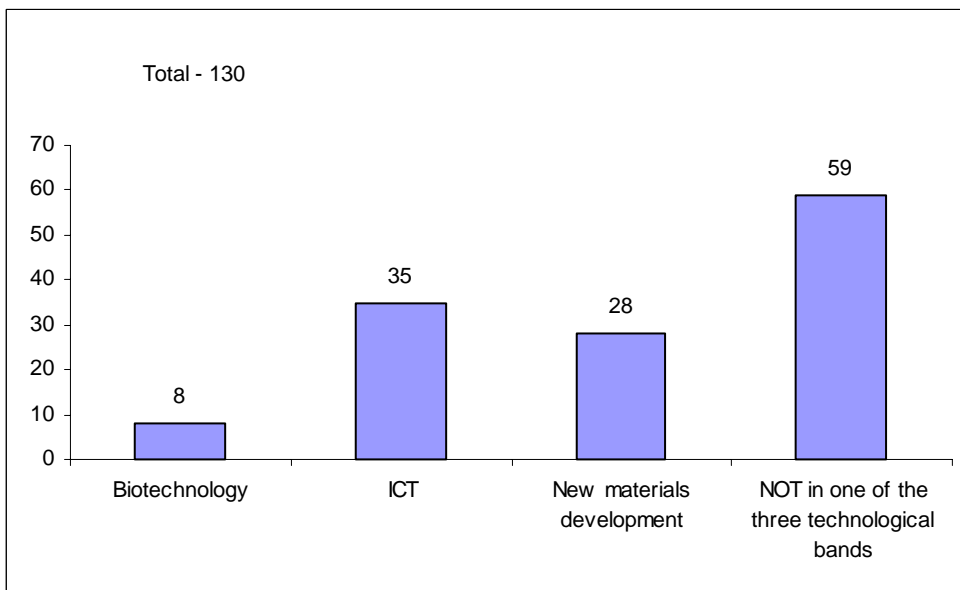


Figure 87: TIPTOP candidates by technological band



11.2 OUTPUTS BY INSTITUTIONAL TYPE

The following table represents the outputs by institutional type and by technological band. Universities are involved in the development of 79% of the outputs, while technikons are involved in 4% of the outputs (Table 8).

Universities are solely responsible for the total products/artefacts both in the fields of biotechnology and ICT and technikons are responsible for two products in the field of

new materials development. Overall, universities account for 85% of the products and technikons 1% (Table 8a).

Table 8b illustrates a similar distribution for the production of patents, with no patents being produced by a technikon. Overall, universities are involved in 23% of the patents produced and SETIs 77%.

In terms of the publication outputs (Table 8c), universities are responsible for the overwhelming majority of publications compared with technikons and SETIs. Nonetheless, the table does show that technikons are involved in the production of at least 31 publications linked to THRIP and Innovation Fund projects.

Table 8d reviews project outputs in terms of student placements and illustrates that the universities account for 78% of the student involvement, SETIs 17% and technikons for 7%.

Table 8: The outputs – by HEI type and by three technological bands

HSRC focus area	SETI	Technikon	University	Total
Biotechnology	133	32	584	749
Information communication technology	82	29	836	946
New materials development	185	38	554	777
Grand total	400	99	1974	2473

Table 8a: Outputs by institutional type and technological band for products/artefacts

HSRC focus area	SETI	Technikon	University	Total
Biotechnology	3	0	22	25
Information communication technology	14	0	78	92
New materials development	12	2	72	86
Grand total	28	2	172	202

Table 8b: Outputs by institutional type and technological band for patents

HSRC focus area	SETI	Technikon	University	Total
Biotechnology	2	0	10	12
Information communication technology	8	0	4	12
New materials development	62	0	7	69
Grand total	72	0	21	93

Table 8c: Outputs by institutional type and technological band for publications

HSRC focus area	SETI	Technikon	University	Total
Biotechnology	16	15	222	253
Information communication technology	30	9	311	351
New materials development	33	7	241	281
Grand total	79	31	774	885

Table 8d: Outputs by institutional type and technological band for students

HSRC focus area	SETI	Technikon	University	Total
Biotechnology	113	17	330	460
Information communication technology	30	20	443	493
New materials development	78	29	234	341
Grand total	221	66	1007	1293

11.3 INDUSTRY'S EXPECTATIONS IN RELATION TO PROJECT OUTPUTS

In the industry survey, a considerably high percentage of respondents (90%) commented that direct outputs were anticipated. Five per cent responded that no direct outputs were anticipated from the projects (Fig 88). These respondents indicated, however, that the reasons for the partnership with the HE institution were not based on direct outputs, but rather on more indirect or less tangible benefits. According to the respondents, these indirect benefits included knowledge gain, the use of HE research facilities, research inputs into technological development and improved efficiency in the research process.

In terms of industry's perceptions of what the intended project outputs will be (or have been), 22% anticipate new technological innovations and products; 19% anticipate improved human resource capacity within the enterprise; 18% anticipate the same improved HR capacity within HE institutions; 16% anticipate the output of commercially exploitable knowledge; 15% the production of increased public knowledge and 11% the increased stock of scientific knowledge (Fig 89). Data on already completed outputs (see Fig 85a) suggests that the production of products or artefacts is not yet aligned with industry's expectations and is presently at 4% of the total outputs. However, the development of human resource capacity (42%) has outstripped expectations. In addition, the production of public, scientific and commercially exploitable knowledge, in the form of publications, is also high in terms of current outputs (52%) and exceeds industry's expectations expressed here.

Figure 88: Industry expectation that there will be DIRECT products/outputs from research

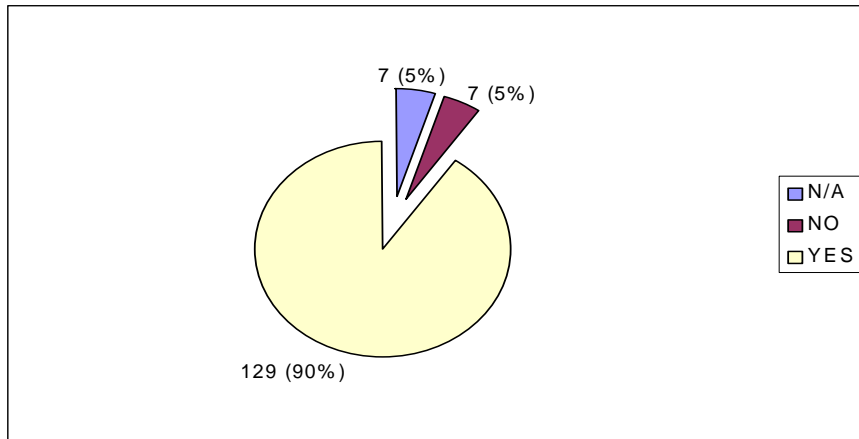
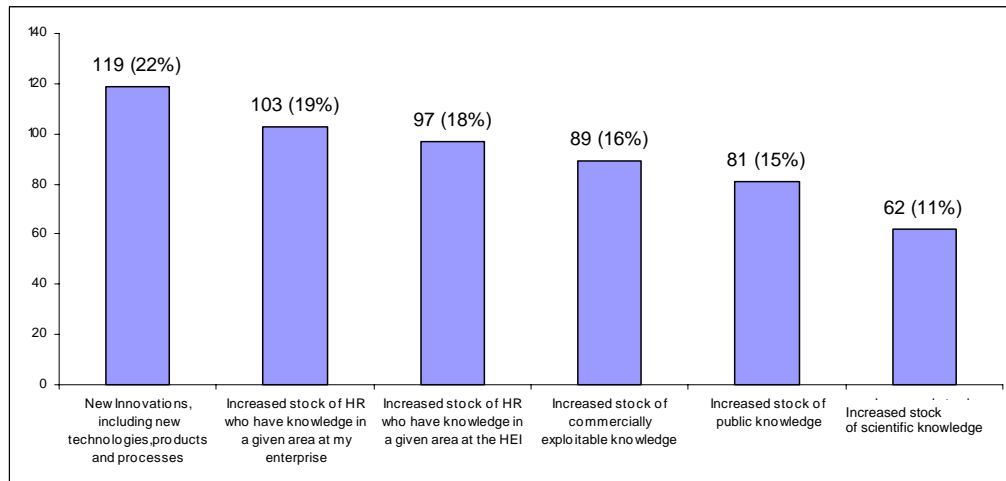


Figure 89: From industry’s perspective, intended products



A full 93% of the industry respondents anticipate that the project outputs will be met and only 4% expect that the outputs will not be met (Fig 90). This illustrates a high level of confidence on the part of industry in the ability of HE-industry partnerships to deliver according to targets and expectations.

Figure 91 probes further into whether or not any additional applications, not initially envisaged as outcomes of the project, have been or are likely to emerge. As indicated, 57% of the respondents reported that they anticipate additional applications to result as part of the partnership projects. And 41% indicated that no additional outputs are likely.

Figure 90: From industry's perspective will the outputs be met?

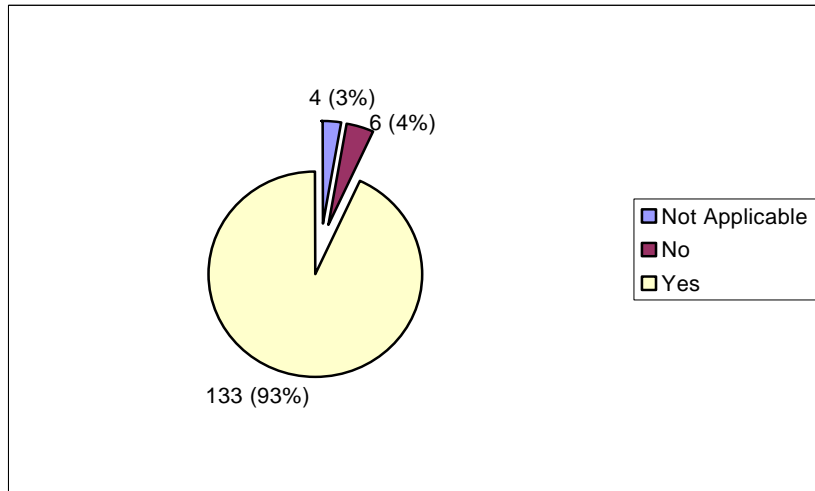
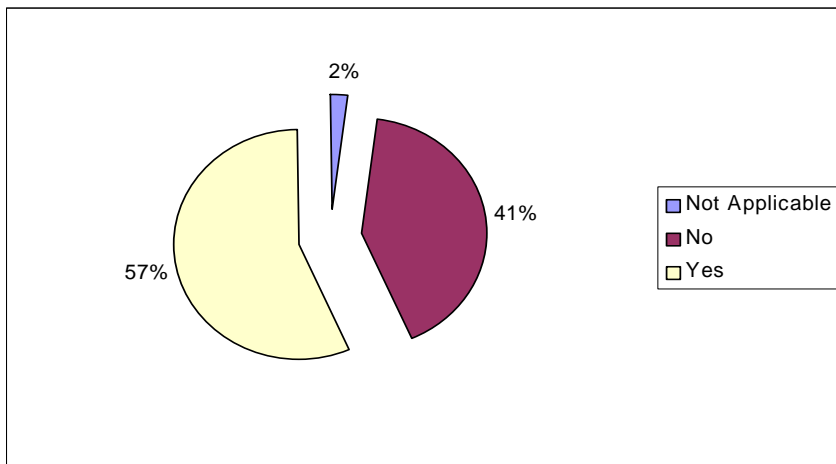


Figure 91: Are there new applications which were developed (or are being developed) that were not initially envisaged? -- industry's perspective



11.4 CONCLUSION

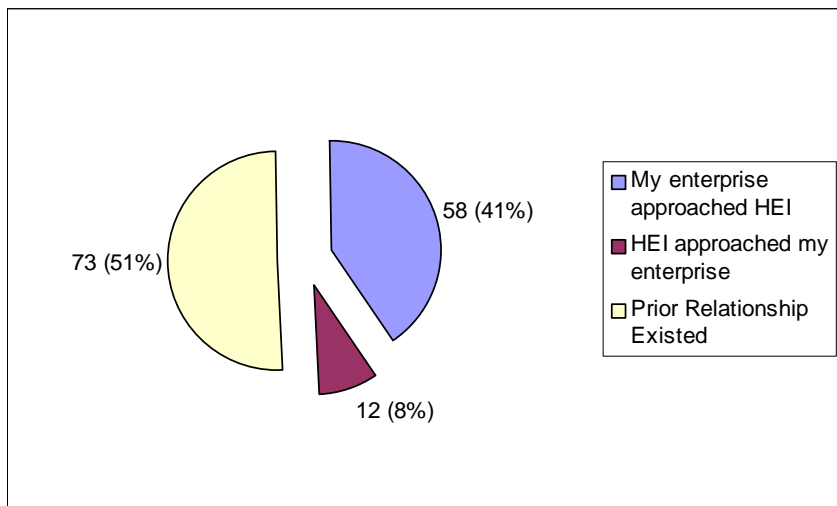
This section indicates that the primary outputs of THRIP and Innovation Fund projects remain the traditional forms of publications and the placement of students. Outputs in relation to publications and students currently outstrip industry's expectations but product or artefact outputs, indicative of innovation, are yet to be aligned with these expectations.

It is clear, however, that industry has a high level of confidence in the ability of HE-industry partnerships to deliver in accordance with project targets. In some instances, additional applications and products and targets, outside of those originally envisioned have resulted from the partnership project.

GOVERNMENT-FUNDED PROJECTS

Figure 92 reviews the manner in which industry's relationships with HE institutions were formed in relation to THRIP and Innovation Fund projects. The data was extracted from information obtained from the industry survey. As indicated, 51% of the respondents reported that their enterprise's relationship with the HE institution was based on a prior relationship. In 41% of the instances, the enterprise approached the HE institution and in only 8% of the cases, the HE institution approached industry. This indicates the extent to which previous relationships facilitate the development of HE-industry partnerships.

Figure 92: How the relationship with HEI that exists through THRIP/Innovation Fund project was initiated

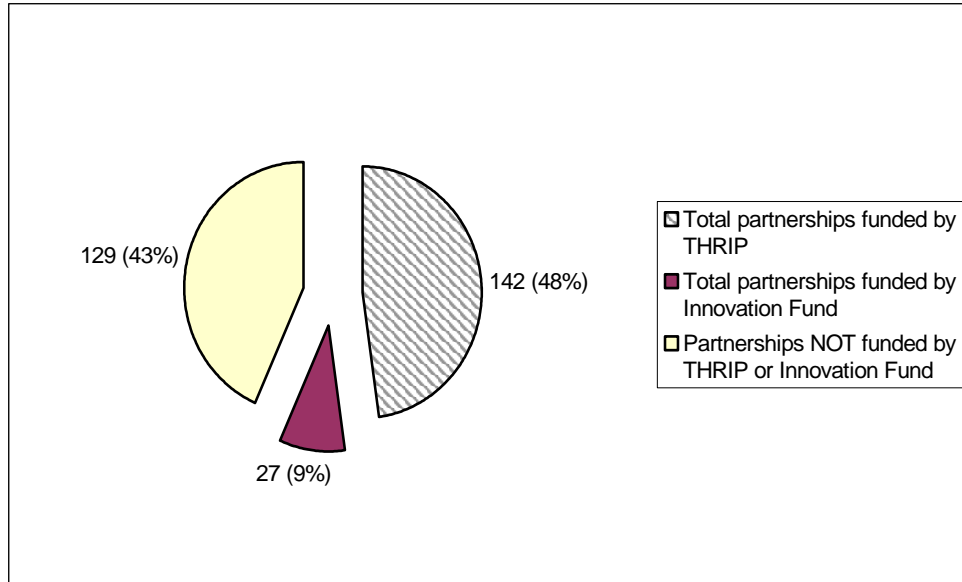


12.1 NUMBER OF PARTNERSHIPS INDUSTRY HAS WITH HE INSTITUTIONS

Figure 93 reviews the total number of partnerships that industry enterprises have with HE institutions, including THRIP and Innovation Fund partnerships, as well as other partnerships not funded by these organisations. The figure illustrates that slightly more than half of HE-industry partnerships are currently THRIP and Innovation Fund partnerships, with only 43% not funded by one of these two organisations. This

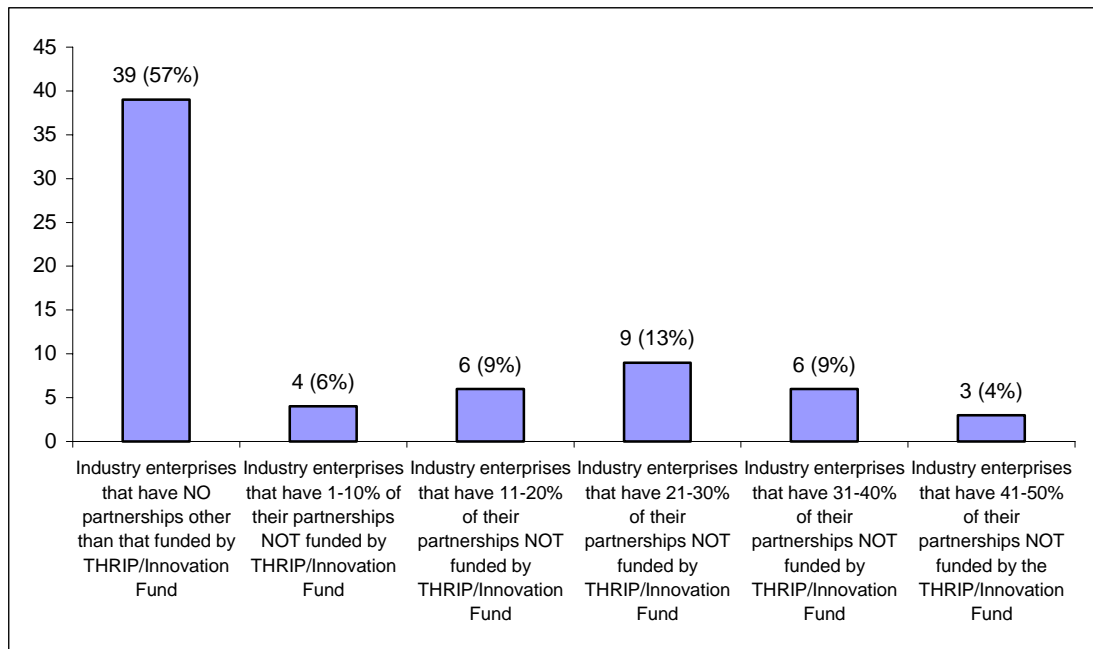
suggests that government funding is currently a critical contributor to the development of HE-industry partnerships in South Africa.

Figure 93: Total partnerships with HEIs: THRIP and IF-funded partnerships compared with total



In terms of the degree to which industry enterprises have partnerships that are not funded by THRIP or the Innovation Fund, 57% have no additional partnerships. A total of 43% of the enterprises have partnerships that are not funded by the Innovation Fund or by THRIP. Of these, 6% have non-THRIP and Innovation Fund funding for between 1% and 10% of their partnerships; 9% have non-THRIP and Innovation Fund funding for between 11% and 20% of their partnerships; 13% have non-THRIP and Innovation Fund funding for between 21% and 30% of their partnerships; 9% have non-THRIP and Innovation Fund funding for between 31% and 40% of their partnerships and only 4% have non-THRIP and Innovation Fund funding for between 41% and 50% of their partnerships (Fig 94).

Figure 94: The degree to which industry enterprises have partnerships that are or are not funded by THRIP/Innovation Fund



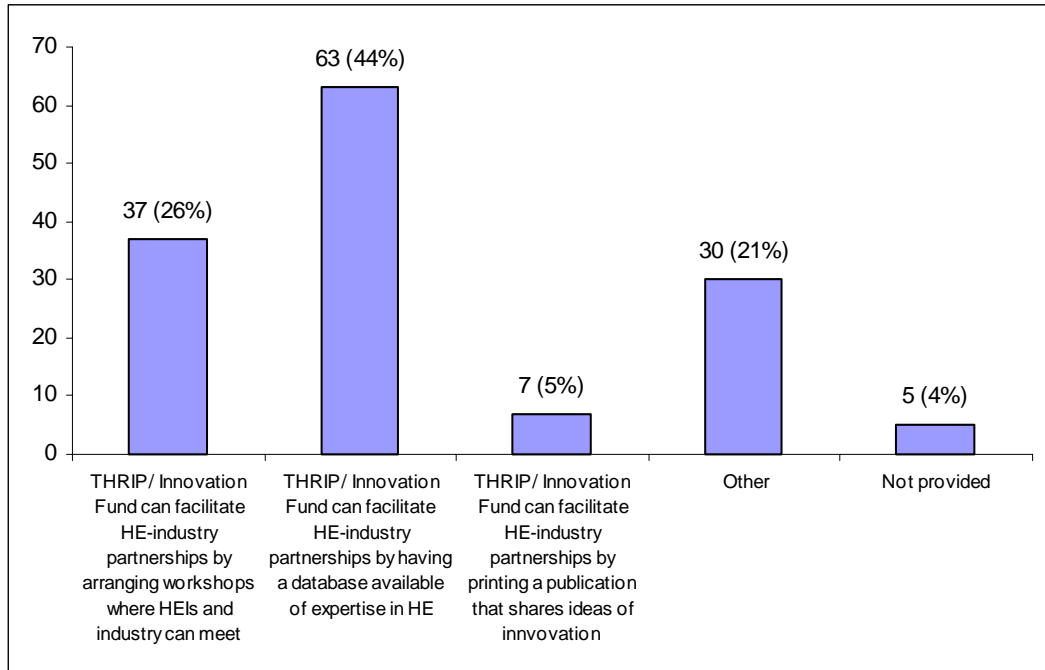
12.2 HOW TO IMPROVE HE-INDUSTRY PARTNERSHIPS

Industry respondents' perceptions of how the Innovation Fund and THRIP could take steps to improve relationships between industry and HE institutions shows that 26% believe that relationships could be improved by the provision of workshops where potential industry and HE partners could meet and review the possible benefits of such a relationship. 44% indicated that relationships could be improved by access to data which indicates what expertise is available in HE institutions. 5% indicated that relationships could be improved by an increased sharing of published information on technological innovation (Fig 95). 21% indicated other possibilities, which include the following:

- Longer-term financial commitment from the funding agencies—current year-by-year funding is seen to prevent longer-term planning and increased project outputs;
- Increased funding of projects to facilitate increased collaboration;
- Permitting greater flexibility in the administration of funds—it is commented that in-house industry-based research and development is not adequately recognised or supported;
- Increased emphasis on assisting HE institutions to focus on product development rather than just research outputs; and

- Matching specific industry requirements with corresponding expertise at HE institution.

Figure 95: Steps that THRIP and the Innovation Fund can take to improve the relationship between industry and HEI



12.3 TERMINATION OF THRIP AND INNOVATION FUND PARTNERSHIPS

In the industry survey, respondents were requested to indicate if current HE-industry partnerships would be terminated on project completion, and if so, how this termination would be performed.

A full 93% of the respondents indicated that the relationship with HE institutions will continue on project completion in another form. This is an extremely positive indicator of the durability and sustainability of partnerships where the benefits of the relationship are perceived as mutually beneficial and the outputs are both innovative and successful. This finding suggests that industry's experience on THRIP and/or Innovation Fund projects has led to a new way of viewing research and development as a form of synergistic collaboration, where academia and industry are brought together within the framework of a mutually reinforcing relationship. A further 20% indicated that the future of the relationship has yet to be determined or is currently not clear. Only 13% of the respondents indicated that the relationship would be terminated on completion of the project (Fig 96).

Figure 96: Indications of how/if the relationship will be terminated

