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NORGINSA AND ACTION NORVÈGE

An evaluation of two programmes for Norwegians
in French higher education

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NIFU STEP

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TABLE OF CONTENT

1	Summary and recommendations	5
1.1	Summary	5
1.2	Recommendations	7
2	1. Introductory issues	9
2.1	The background of the evaluation	9
2.2	Aims of the evaluation	10
2.3	The structure of the report	10
2.4	Methodological approach	11
3	General part	15
3.1	French higher education and studying in Toulouse	15
3.2	Anchoring on Norwegian side	17
3.3	Anchoring on French side	20
3.4	Marketing and recruitment	21
3.4.1	Geographical recruitment pattern	22
3.5	Information strategy	23
3.6	French-Norwegian relations as a result of the Norwegian programmes in Toulouse 29	
3.7	Special qualities gained	30
3.8	Experiences from the labour market	31
3.8.1	Entering the job market	31
3.8.2	Advantages of studies	33
3.8.3	Differences between INSA and UT1 candidates and students	37
3.8.4	Employers' knowledge of the programmes	38
3.8.5	Marketing of the candidates	39
3.9	Synergies from the two programmes	40
3.10	Financial issues and costs of the programmes and the change of funding from the State Educational Loan Fund (Lånekassen)	41
3.11	The N+I programme. Could it substitute or complement NORGINSA?	43
3.12	The two programmes in light of the Quality Reform	43
4	INSA Toulouse	46
4.1	NORGINSA	47
5	The university and studies at UT1 Sciences Sociales	52
5.1	Action Norvège – the programme and students	53

Tables and figures

Table 2.1	Persons participating in the survey, old and present students, INSA and UT1.12	
Table 3.1	Were the grades obtained at upper secondary school high enough to enter a comparable university in Norway? Percent	21
Table 3.2	How did you experience the entry examinations? They were... (percent)	28
Table 3.3	How much energy was needed to get a job?.....	32
Table 3.4	How many months did it take you after graduation to find a job?	32
Table 3.5	Do you think it would be easier to get a job with a comparable Norwegian higher education?	32
Table 3.6	How do you feel Norwegian employers appreciate this study programme?	32
Table 3.7	Does it seem that Norwegian employers know the programme you followed in Toulouse?	38
Table 4.1	Number of Norwegian students at different levels of studies at INSA Toulouse. 1990-1991 to 2005-06.	49
Table 5.1	Success rates for classes of Norwegian students at the field Economics and Management, Faculty of economics, UT1. 2000-2005.	55
Figure 3.1	To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	34
Figure 3.2	To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	35
Figure 3.3	To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	35
Figure 3.4	To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	36
Figure 3.5	To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	36
Figure 3.6	To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	37
Figure 3.7	To what extent your study sojourn in Toulouse has led to disadvantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180).....	38
Figure 4.1	Number of Norwegian students at the different levels (study years) at INSA Toulouse. 1990-2000.....	50
Figure 5.1	Number of Norwegian students registered at different levels of studies at Faculty for economics at UT1	54
Figure 5.2	Number of registered Norwegian students at the different levels (study years) at UT1. 1992 – 1999.....	55

Preface

In 1986, an agreement on economical, technological and scientific cooperation between France and Norway, the so called Troll agreement, was signed. One of the many initiatives to emanate from the Troll agreement was to ensure that more Norwegian students would study technology and business administration in France. The Norwegian Centre for International Cooperation in Higher Education (SIU) serves as the National Agency for the programmes. With the prospect of the renegotiations of the agreements in 2005, it was decided to evaluate the programmes. The evaluation, presented in this report, was conducted by Agnete Vabø and Lars Nerdrum, both senior researchers at NIFU STEP - Studies in innovation, research and education, Oslo. Senior researcher Jannecke Wiers-Jenssen and Programme Director Bjørn Stensaker have contributed with useful comments. Gratitude is also expressed to all those who were willing to participate in the interviews, both in France and in Norway, and to former and current students at the programmes who have participated in the survey. Ingebjørg Birkeland, Helene Rønning and Anne Westheim at SIU, has provided valuable information to the evaluation. SIU has also contributed to the final version of the report, by pointing to factual errors and the need for improving clarity on some issues.

1 Summary and recommendations

In this chapter we will sum up the main findings of the evaluation and recommend some measures that needs to be taken in order to improve the French-Norwegian cooperation programmes in Toulouse.

1.1 Summary

The programmes have increased the number of Norwegians studying technology or business administration in France. Most present and former students (contacted for the purposes of this evaluation) responded that they would not have attended these studies in France on an individual basis. However, it is a fact that around half of the Norwegian students attending INSA do not complete a full degree there, but continue corresponding degree studies elsewhere, most often at Norwegian universities (NTNU). For UT1 we do not have statistics on the “survival” in the study cursus because the data we have received covers all Norwegians, not only those who are part of Action Norvège.¹ Because many Norwegians attend UT1 at some point during the course of their studies – in itself a good thing – we are unable to follow only those who attend this university in the preparatory year. For each individual leaving before the accomplishment of the studies, the interruption is not necessarily the result of “failure”. Many leave early (during or just after the first year in Toulouse) because they found that they did not want to become an engineer or an economist. Others leave because they want to return to Norway to join family or friends, and others again because they are uncomfortable with the studies, the French pedagogy and higher education system in general or just because they do not want to study as hard as required to pass. Many of these pursue higher education elsewhere and succeed well, and many also report that their studies in Toulouse were fruitful and important to their personal intellectual and cultural development. This argument is supported by the French administrators who consider an interruption in the studies to be a natural phenomenon, stating that it should not necessarily be interpreted as a proof that something is wrong. They argue that even short stays of a year or two will be positive for Norwegians due to the valuable new theoretical impulses and language training that these receive during the first period of their time in Toulouse.

¹ Based on what we have seen at UT1, we have the impression (admittedly not supported by hard facts) that about the same proportion as we find at INSA tend to leave before the accomplishment of the studies (5 years before the bachelor-master system and 6 years after).

Nevertheless, from a point of view of the underlying intentions of the programmes and of the Troll agreement, the fact that so many participants leave during their studies is slightly disappointing and leads us to conclude that an important aim of the programmes (i.e. that of ensuring that many Norwegians would study technology and business in France) is only partly fulfilled. However, even regular national students are more and more mobile. Mobility between Bachelor Degree and Master Degree is encouraged by EU policy for higher education and it is therefore quite natural that the same patterns are recognised among the Norwegian students participating at these two programmes in Toulouse. That fact, isolated, contributes to lower the accomplishment rates among Norwegians.

To some extent, furthermore, the negative side of dropping out is counterbalanced by the reports from those who only had a short stay in Toulouse claiming that their experience was useful to them anyhow, when pursuing a corresponding or alternative degree elsewhere, often in Norway. Furthermore, drop outs and poor recruitment numbers should be compared against the high level of “educational satisfaction” and professional success of those who has completed since the agreement was implemented. Despite the many attempts of the programmes to remove cultural and linguistic barriers to higher education studies in France, one should also bear in mind that the students are quite young and expected to stay in Toulouse for many years, something that cannot be expected to suit all young Norwegians. The drop-out rate is therefore not an issue that should be considered as a matter of great concern. The economic, cultural and symbolic value added to the Franco-Norwegian relations because of all the activities related to the programmes should not be underestimated.

In recent years there has also been a decrease in number of applicants. It is nevertheless an observation at both institutions that the quality of the students has not fallen. There are always some brilliant students among the newcomers. The reduced number of applicants is more worrisome, particularly since both SUHF and the two institutions in Toulouse have spent considerable time and resources on measures to favour recruitment. Both at INSA and UT1, the fact that there is a slightly falling number of persons entering the first year of studies (i.e. the preparation year at UT1), leads to a fear that there will be financial difficulties in the programmes. Over time, this will lead to pressures from the two institutions to reduce the pedagogical and administrative activity of the two programmes. In the academic year 2005-2006, both programmes will run deficits due to an insufficient number of new students.

Recruitment activities are therefore very important to both programmes and this issue must be addressed by all implied parties. In that respect SUHF needs to be integrated much more into the activities of SIU in order to exploit synergy effects as well as to become a sustainable unit.

1.2 Recommendations

- Recruitment activities are very important to both programmes and this issue must be addressed by all implied parties
- In the years to come SIU will face great challenges concerning how to improve their strategy of information on these two programmes, both with respect to increasing the number of qualified applicants as well as reducing costs. We recommend that SUHF/SIU:
 - o Use students (only) to visit relevant Norwegian secondary schools
 - o Give priority to information to upper secondary school classes in the natural sciences
 - o Continue having stands at educational fairs. The stands must be large in order to be visible. The programs should be represented by professors from INSA and UT1, program officers from SIU and, if possible, students.
 - o Improve the content and design of brochures and posters. (Make both large and small posters)
 - o Use professionals to develop a new VHS/DVD promoting the programmes
 - o Market the programmes to relevant employers (for instance by coverage in newspapers and magazines like Dagens Næringsliv, Finansavisen, Kapital, Kaleidoskopet) or by direct information. Both programmes could benefit from a more profiling marketing strategy utilizing the special qualities obtained by Norwegian students in Toulouse (for instance good knowledge of French culture and language, analytical skills, ability to work under pressure, more knowledge and theoretical skills etcetera). Timing is also important, for instance SIU should be particularly aware of the periods for recruitment of new trainees in large companies.

- Central educational authorities should support further investments in the marketing of the programmes. Such costs are counterbalanced by the benefits to Norwegian society in general. And since INSA and UT1 do not charge tuition fee other than the first years specially tailored for the Norwegian students, the two programmes are less costly than for students choosing similar programmes in the USA, Australia or the UK.
- Werecommend that SIU/SUHF develop a targeted recruitment strategy towards secondary schools in collaboration with the COMENIUS programme. (Select specific schools and regions for certain periods, keep a dialog with the schools on a regular basis throughout the year).
- SUHF should consider ways in which to develop a conscious use of the expertise of the division for information at SIU
- The removal of the tuition fee scholarship and the travel scholarship threatens the recruitment to the two programmes, particularly INSA. The central educational authorities should be made aware of the non-intended consequences of this change of funding, for instance regarding the geographical dissemination of the applicants.
- Agreements within the ERASMUS programme should not substitute NORGINSA
- The N+1 programme should not substitute or complement NORGINSA or ACTION NORVÈGE
- SIU could consider expanding the programs through collaboration with other Scandinavian countries
- This evaluation has uncovered that NHH does not accept to enrol candidates with Bachelor degrees from UT1. A solution is needed to overcome this problem.
- We question the value of the extensive system of entrance requirements, for instance the motivational tests of freshmen at UT1. We suggest that SIU takes the initiative to negotiate with INSA and UT1 about the possibilities for developing a more efficient and less resource demanding system for recruitment.

2 1. Introductory issues

2.1 The background of the evaluation

An agreement about economical, technological and scientific cooperation between France and Norway, the so called Troll agreement, was signed on December 3rd 1986. One of the many initiatives to emanate from the Troll agreement was to ensure that more Norwegian students would study technology and economics and business administration in France.

Despite the fact that France is an industrially highly advanced country, with a renowned science and higher education system, there were very few Norwegian students in France, and most of them studied art or philology. Since the knowledge of French language and culture is crucial for trade and all sorts of collaboration with France, it was expected that an increase in the number of Norwegian students in diploma studies within technology and economics and business administration would contribute to fulfil the intentions in the Troll agreement.

The Norwegian authorities entered into agreements with two renowned French institutions of higher education in Toulouse; Institut National des Sciences Appliquées (INSA) in 1990 and Université de Toulouse 1, Sciences Sociales (UT1) in 1992.

The choice of UT1 the second agreement that was negotiated, was based on evaluation of academic quality, just at that of INSA two years earlier. However, the localisation of the two in the same city contributed to a hope that administrative and financial synergy effects could be achieved.

SIU (The Norwegian Centre for International Cooperation in Higher Education) ensures the administration of the two programmes from the Norwegian side, through SUHF (The Norwegian Centre for University Cooperation with France, recently renamed into The Norwegian Programme for University Cooperation with France).

Both programmes have 5 year agreements, and are up for renewal in December 2005. The contract with UT1 actually expired in December 2004, but a provisional renewal of a year was then passed to await the engagement of a new director of both SIU and SUHF. Both the French and Norwegian sides agree that the coming renegotiations of the agreements constitute an opportune moment to evaluate the programmes. The design of the evaluation and the methodologies used are outlined in the following.

2.2 Aims of the evaluation

According to the terms of reference of the invitation to tender, the evaluation of the two programmes has two main aims:

Firstly, to distil knowledge and experiences which can lead to a qualitative improvement of current and future activities. Secondly, the evaluation shall provide information on the outcomes of the programme.

A number of tentative issues to be examined in the evaluation were listed in the Terms of reference. In general, the issues can be structured under the following headings:

- French higher education and studying in Toulouse
- Anchoring of the programmes on both the French and the Norwegian side
- Marketing and recruitment
- The effects on French-Norwegian relations as result of the Norwegian programmes
- Experiences from the labour market
- Synergies from the two programmes
- Financial issues
- Alternative ways of organising the programmes
- The two programmes in light of the Quality Reform
- Specific issues regarding the functioning of the programmes at INSA and UT1

2.3 The structure of the report

The report is divided into five main chapters. The first contains summary and recommendations. The second chapter contains introductory issues such as the background of the evaluation and methodological approach. The third general chapter treats issues common to both NORGINSA and ACTION NORVEGE, such as organisational anchoring, marketing and recruitment. In chapters four and five, specific features of NORGINSA and ACTION

NORVEGE are treated separately, such as educational content, patterns of recruitment and throughput.

2.4 Methodological approach

We applied a methodological strategy combining different methods and empirical data sources; survey, interviews and various written sources and documents. Five groups of informants were used: Former students, current students, employers recruiting candidates from the programmes, programme administrators in France and Norway, and professors at INSA and UT1.

The electronic survey was sent to former students.

The electronic survey was also sent to students currently enrolled. In addition, group interviews with second year and advanced students at INSA and UT1 were undertaken. The ANSA president of France was also interviewed.

SUHF, INSA and UT1 provided data on student completion rates, drop-out, examination results etc. We also did valuable archive search at SIU in Bergen.

The main source of data on former and current students was retrieved by a web-based survey. Lists of names of all former students who have been at one of the programmes, as well as their e-mail addresses and postal addresses and the name and address of their employers were kept up-to-date to 2003, and were made available to NIFU STEP by SIU. We sent this e-survey by e-mail to all former and present students, explained the purpose of the survey and asked them to respond. All together, there were 452 names (225 at UT1 and 227 at INSA) on the list we received from SUHF. Of these, 23 had no e-mail address, and 13 addresses gave automatic responses saying that the owner of the e-mail address was not available. We then had a sample of 416 potential respondents. We received an updated list from ANSA at UT1 where around half of the addresses for ongoing UT1-students were changed. Altogether we asked the potential respondents to answer the e-questionnaire five times. When we took the statistical data from the server Thursday 27th October, we had 286 valid responses. Around 20 had entered the link leading them to the questionnaire, but had not answered it. These are removed from the data set. Others have answered parts of the questionnaire, and are not

removed from the data set because their responses can be used for issues early in the questionnaire.²

Table 2.1 Persons participating in the survey, old and present students, INSA and UT1.

	INSA	UT1 (old)	UT1 (new)	Total
Still student	20	2	18	40
No longer student	129	103	6	238
Total	149	105	24	278

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

It is difficult to calculate response rates from e-surveys, because it is difficult to know whether the receivers have read the e-mail where the questionnaire is linked from. Many of the e-mail addresses used were “hotmail”, “gmail” and “yahoo” addresses. We know that many such addresses are not used by their owners (e.g. because they have one at their work that they also use for private e-mails). If everyone on the list has received the e-mail inviting them to participate at the survey, then response rate for usable answers would be 69 percent. But in reality it is probably well higher than that, because very many have probably not been aware of the survey at all. None asked to be removed from the response list, something that they were invited to do. This response is very satisfactory; such good response gives fairly accurate results from a statistical point of view and can generally be considered representative. Because of the limitations of time allotted to this project, we have not been able to exploit the data optimally. Much more quantitative work could be done, and would contribute to respond with more accuracy to questions that one may ask about these programmes and the persons who have studied in Toulouse, but that do not fit into the design of this evaluation. We report from the issues that we consider being most important for the purposes of the present evaluation.

Regarding the former students we surveyed their present situation based on collected information on:

- Grades upon admission
- Motivations for application and experiences from the application procedure
- Study conditions

² In the e-questionnaire, the respondents were not able to progress from one page to the next without giving in valid information. For people leaving before accomplishing the questionnaire, the early questions are always filled in.

- Perceived social and cultural effects from the programmes
- The perception of advantages/disadvantages of localisation of “other” study programme for Norwegians in Toulouse
- Examination results, study conditions (whether they study more than typical students, a question in the survey)
- Experiences with potential employers (in Norway and abroad) and their attitudes vis-à-vis quality and renown of these French study programmes
- Time span between graduation and getting the first job
- Employment history after graduation
- Type and level of current occupation
- Wages

The current students responded to the first part of the survey. In addition they answered to questions pertaining to expectations of how they foresee their professional life after graduation, particularly how they anticipate their attractiveness and recognition among Norwegian employers.

Furthermore, these quantitative data were supplemented by insight from qualitative interviews with a selected number of students currently enrolled in the programmes.

We organised group interviews with persons at different level of study on the two programmes – freshmen and more experienced students. At INSA, one group interview with second year students and one with advanced students. At UT1 we carried through four group interviews, with preparatory year students, 1st year students, 2nd year students and advanced students.

Some of the companies employing graduates from these two study programmes were interviewed by telephone (with relevant representatives of the firms); Schlumberger, Det Norske Veritas, Hydro ASA, Kongsberg Aerospace and Defence, Statoil ASA and Accenture. Issues like the renommé of the two study programmes in general, how they heard about them, how they recruited these graduates, as well as their expectations and experiences with this

type of graduates – compared to graduates from resembling study programmes in Norway and elsewhere – were addressed.

Programme administrators in France and Norway were interviewed in order to gain information about organisational matters and how the two programmes are run and work within the two higher education institutions where they are implemented. We also studied documents and contracts of the agreements, interviewed some of the people formerly involved (like former director of SUHF Rolf Tobiassen, as well as the equivalent persons on the French side, at the respective universities) and the ones in charge of the programmes now both in SUHF/SIU and in France. At INSA we interviewed six professors and administrators. Apart from interviews with two administrative responsible at UT1, four interviews, of which three of them were group interviews, were organised with professors in economy (three informants), maths (four informants), French (two informants) and law (one informants).

Apart from the interviews and correspondence we had with the two programme officers, at SIU we also interviewed four people among the staff with particular knowledge of the two programmes, director, former director and seniors advisors.

Both INSA and UT1 were most cooperative and contributed greatly to the organisation of the interviews, and have thus contributed to the quality of the evaluation. SIU has also contributed to the final version of the report, by pointing to factual errors and to improve clarity on some issues. Possible shortcomings or misinterpretations are at the charge of the evaluators at NIFU STEP.

3 General part

3.1 French higher education and studying in Toulouse

The French education system has traditionally been highly selective. It still is, although France, as most other European countries, currently undergoes profound changes in its educational system from primary to tertiary education. As the French secondary educational system becomes one of massification (a political aim is that 80 percent of the age classes pass the baccalauréat), the level of the studies is said to have fallen over the past years. Following the Bologna process, France is now implementing the European Bachelor-Master degree system.

French higher education enjoys a high prestige, both in France and internationally. That is particularly the case of the “Grandes Ecoles”, considered as the most prestigious of French higher education institutions, but that is also generally the case for universities. Traditionally, entrance to “Grandes Ecoles” has been highly selective through the “concours system” (e.g. competitive entry examinations) whereby the “concours” was prepared in special preparation classes organised by upper secondary schools (lycées) during several years after the baccalauréat. Preparation to and entrance at the “Grandes Ecoles” preparing for engineering and natural sciences were primarily based on results in test in mathematics, physics and other “hard” theoretical subjects, and only a limited and *a priori* defined number of students were admitted (*numerus clausus*). On the other extreme, entrance at university studies was totally open, provided the entrant had the formal requirements (passed the baccalauréat). The selection to such studies comes most often before the second and third year, where the enrolment in subsequent years of studies followed a principle of *numerus clausus*, for some fields of study, or a principle of qualitative requirements (sanctioned by grades at the previous year’s examination) for others.

INSA in Toulouse is part of a special “INSA-family”, of five “Grandes Ecoles” which do not use the “concours”-system for admittance. Rather, pupils are judged by results during the last two years of secondary education (lycée), that with or without a complement of interviews are used to select applicants. Instead of a 2+3 year model (two years of preparation and three years of engineering studies), INSA has chosen a 3+2 year model (three years of Bachelor and 2 years of Master). It is argued that this system is more integrated (because INSA can take the control of all the post-secondary teaching) and that it is better for potential students (who know immediately after baccalauréat whether they are admitted or not), reducing thereby the

uncertainty for students who spend 2-3 years just to prepare their “concours”. The system therefore is particularly appreciated by students from relatively modest socio-economic backgrounds.

UT1 uses the normal university entrance requirements, and around 60 percent of students who entered first year of studies are admitted as qualified for the second year of studies. They are judged upon quality by using grades at first year’s exams.

French higher education is generally still to a large extent based on relatively traditional pedagogy, for instance, there is much lecture-based teaching in amphitheatres containing several hundred students and curricula are largely defined by what is taught during the classes, not by defined reference literature (although supportive bibliographies are proposed). This is also the case in French secondary education which prepares for learning emphasising the accumulation of objective knowledge in a wide variety of areas. A valuable ability of a pupil is to take notes from the lessons, while at the same time being able to follow and understand the lesson. This ability is fairly unknown by Norwegian students, and becomes a hurdle and a difficulty for many when entering French education system at a higher level. Values which are less encouraged by this system are subjective interpretation of knowledge by students, student-initiated work and cooperative learning, and general student participation and involvement in class situations. However, according to our informants from INSA, pedagogical reforms aiming at improving such qualities are recently implemented.

Another distinctive feature in French education is the importance of mathematics and other basic natural science knowledge in all subjects where such theoretical tools may be useful. The dominant opinion among university professors is that such methods and the way of thinking that mathematics prepares for are indispensable both for fulfilling higher education and for succeeding in the labour market. As a result, French higher education has the reputation of preparing students who are solidly educated in basic and theoretical skills and who are very comfortable in the use of quantitative methods and calculations.

Toulouse is a very interesting city in the South-West of France. The Toulouse agglomeration is currently in strong growth (attaining at present around 700.000 inhabitants) due to the dynamics of its particularly valuable knowledge-intensive cluster in aerospace, electronics, informatics and microtechnology. Its first university was established in 1229. Nowadays, more than 110.000 students attend one of the three universities or one of the fourteen colleges and “Grandes Ecoles”. Not only offering an interesting environment for learning, Toulouse is furthermore a beautiful city and the climate is very nice. It is situated geographically in

between the Atlantic sea and the Mediterranean, both well known for nice holiday resorts and summer-time tourism. It is equally close to the Spanish border and to the Pyrenees, with outdoor activities of various types.

3.2 Anchoring on Norwegian side

The cooperation is regulated by an agreement between the Norwegian Ministry of research and education and the two institutions. Apart from the overall goals of the programmes, this agreement concerns admission requirements, educational content specially tailored for Norwegian students, reporting procedures, financing and student accommodation.

In Norway, two programme officers have the main responsibility for running the programmes. The two officers are very well qualified; Helene Rønning has a Master in French from the University of Oslo and her last position before commencing in SIU in 2004 was as an advisor in the Norwegian Directorate for Primary and Secondary Education. She grew up partly in French-speaking Belgium. Anne Westheim earned a Master in sociology from the universities of Montpellier III and Lyon II. Altogether, she lived in France for 7 ½ years. Anne Westheim has 8 years of work experience previous to her taking up her present position in SUHF in 2001, amongst other she has experience from career advisory services at the University of Oslo.

In 2004 the Ministry for education and research assigned SIU the function as the central national institution for the management of international cooperation in higher education. Consequently, SUHF (established in 1988), which had an autonomous position and held localities at the University of Oslo, is now organised as a part of SIU in Bergen. Westheim followed SUHF from Oslo to Bergen, but Rønning became employed at SIU. They are now both commuting between Bergen and Oslo.

According to the programme officers, the running of the programmes can be broken to in the following activities:

- Establish/negotiate the agreements, stay in contact with French institutions,
- Provide information about the Norwegian educational system and Norway to collaborative institutions in France.
- Information directed towards the Norwegian “student market” (guidance and visits to secondary schools)

- Application procedure
- Translate and distribute application forms
- Guidance of applicants
- Receive and prepare applications
- Preparation of files from applicants to INSA and UT1
- Arrange admission tests in Oslo
- Follow up the students
- Participate in the assessments of the programmes
- Revise the agreements by the end of duration of contract

In addition to the administration of the two programmes, the officers coordinate some of the activities at the “French-Norwegian Centre” at the University of Caen. They have the responsibility for application procedures and other administrative matters for a one-year course in French for teachers and students within teacher training and an instrumental subject of six weeks duration serving both as a preparatory course for students going to other higher education institutions in France, as well as a general French language course.

SUHF also provides general information about study possibilities in France.

Most students interviewed were very pleased with the various forms of service provided to them by SUHF. The programme officers offered both practical and academic assistance, and appears to be very flexible.

The management of the two programmes on the Norwegian side is in a transitional phase. A working group at SIU lead by the former director of SIU, Ulf Lie, is currently going through the various tasks and work load connected to the management of the activities in France. It will possibly develop a new model for the integration of SUHF within the SIU structure.

It seems that if one should obtain any positive effects from the organization of SUHF to SIU, SUHF needs to be integrated much more into the activities of SIU. This would create synergy effects and enable SUHF to take advantage of the transmission of competence from a large specialised organisation like SIU. A better integration including a larger number of staff could

also make the management of these activities less vulnerable in case of absence of staff due to illness and the like.

However, SUHF's activities require excellent competence in French language, society and educational system. In their future planning SIU should also bear in mind the need for contact and collaboration with stakeholders at different levels on French and Norwegian side such as the French-Norwegian Chamber of Commerce. Former UiO lecturer in French, Rolf Tobiassen, was the founding father of these agreements. During the last two decades Rolf Tobiassen, with the excellent help of his programme officers, has worked very actively to build up and maintain such relations. Tobiassen (now retired) was recently appointed the Norwegian King's gold Medal for Merit for his contribution to strengthening Norway's relation to France.

Bilateral agreements of this kind also requires strong personal involvement since one has to motivate applicants on individual basis, and since one has to cultivate the interpersonal (resource) networks developed over time between various institutions in France and Norway. This types of challenges are too complex to pursue further within the frame of this evaluation. These issues need to be analysed in relation to the total internal organization as well as the external framing of SIU's activities, regarding human resource management and organisational mapping. Besides, the future organisation should serve the special features and needs of the programmes, a question dependent on the follow up of this evaluation.

Another issue that should be addressed is the financial situation of SUHF. After the transfer to SIU the budget of SUHF has been reduced, both because it must cover items that were earlier covered over the budget of the University of Oslo (particularly pertaining to housing and wages). Activities related to SUHF (travels, organisation of admission to the programmes in Toulouse) may seem to be more costly to organise from Bergen than from Oslo. According to SUHF's own figures, they use approximately 1.2 man-year annually for the operation of the two programmes. However, the programme officers also work quite many extra non-remunerable hours. This situation seems difficult to sustain in the long run.

When organized within SIU one should expect to benefit from economics of scale. SUHF could get useful contacts by using the networks to upper secondary schools developed in relation to the COMENIUS programme. It should also benefit from a more active use of SIU's own section for marketing.

3.3 Anchoring on French side

At INSA there are two persons among the staff who have particular responsibility for the Norwegian students, and both the administrative and the pedagogical responsible are also lecturers. The functioning of the programmes is dependent upon a group of well-qualified and enthusiastic academic staff that really seems to appreciate to deal with and to teach Norwegian students. Over time, many professors have been involved in teaching and adjusting the educational programme specially tailored for Norwegian students. Trips to Norway in connection with the recruitment of students and marketing of the programmes in secondary schools have also been motivating to participating staff.

At UT1, the Dean of the Faculty of economics, who also teaches accounting, is responsible for both administrative and pedagogical issues related to the programme, but he is assisted by another lecturer in accounting, who is thus very involved in the running of the programme. The Dean's secretary is also involved with practical administrative and organisational work.

The organisation of both programmes seems to be efficient and well designed for the purpose and needs of the programmes. This is also confirmed by staff on Norwegian side and the Norwegian students we interviewed. A majority responded that they were pleased with the administrative services on French side. As also evident from the survey the students evaluations of the professors were extremely positive; they were said to be very experienced strong academics, also caring and sensitive, for instance in terms of adjusting the teaching in line with the needs of the students.

The staff is concerned about the recent decrease in applicants and students. But still, some of them argued that they prefer few good Norwegian students rather than many mediocre. We also find it rather impressive that some Norwegian students with special needs (learning difficulties, social problems) have been followed up by the academic staff, for instance by the hiring of a personal assistant in one concrete case.

In accordance with the agreement with UT1, SUHF helps UT1 students finding accommodation and settling down. This type of service implies amongst other helping the students setting up leasing- agreements, establishing a bank account and providing transport to IKEA.

At INSA, the NORGINSA administration provides help with accommodation and other practicalities (insurance, telephone) to the Norwegian students.

Some students asked for “mentoring” services by older students for both practical and study-related questions. In the future it might be provided by ANSA, which has a large unit in Toulouse.

3.4 Marketing and recruitment

Recruitment to higher education can generally be understood as one step in a larger process of social selection. The selection criteria of the two programmes in Toulouse are, however, rather demanding compared to similar study tracks elsewhere. First and foremost, one must be willing to spend several years abroad, far from home. Secondly, in order to satisfy entry requirements, one should hold a fairly good level in maths (for both) and in natural sciences (for INSA). Thirdly, one should also be motivated to learn French, preferably have some knowledge of French language before joining one of the programmes (although it is not a formal requirement and also since there are regularly successful students without prior knowledge in French). Since rather few students in Norwegian secondary education combine specialisation of maths and the natural sciences with French as a second language there are relatively few eligible students who satisfy all the selection criteria.

It is not surprising then that the programmes typically recruit very able students, many of whom have parents with an international experience from studies and/or work. Around 40 percent respond that one or both their parents had lived abroad.

According to other general surveys undertaken among Norwegian students abroad, this figure is more or less in line with the average numbers in that respect (Wiers-Jenssen 2005).

Table 3.1 Were the grades obtained at upper secondary school high enough to enter a comparable university in Norway? Percent

	INSA	UT1	Total
Yes	94,1	81,1	88,1
No	1,3	5,3	3,2
I don't know or I haven't tried	4,6	13,6	8,8
Total	100,0	100,0	100,0
N	153	132	285

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

As it appears from the table, the Norwegians in the two programmes in Toulouse are highly selected. Only 3 percent of them said they did not have sufficiently good grades to enter comparable higher education studies in Norway. Nearly 9 percent did not know or did not apply in Norway.

Figure 3.1 *Would you go to another French higher education institution if the Norwegian programme in Toulouse did not exist? Percent*

	INSA	UT1	Total
Yes, Probably	8,5	18,2	13,0
Maybe	22,9	32,6	27,4
No, hardly	46,4	37,1	42,1
No, surely not	20,9	12,1	16,8
I don't know	1,3	0,0	0,7
Total	100,0	100,0	100,0
N	153	132	285

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVÈGE

Nearly 60 percent of the students who have been or who are at one of the programmes, say they would hardly or surely not have gone to France to study without the offer from the programmes. Only 13 percent of the students said they would probably study in France without the programmes. There are particularly few of the engineering students who would choose to go to France. It is therefore quite clear that the programmes mobilise quite many Norwegians to higher education studies in France that would not otherwise have made that choice.

Table 3.3 *Share of students whose parents had studied or lived abroad. Percent*

	INSA		UT1	
	Mother	Father	Mother	Father
Studied abroad	9,3	12,6	9,1	10,6
Lived abroad for other reasons	37,1	30,5	37,9	33,4
Neither lived or studied abroad	53,6	57,0	53,1	56,1
Total	100,0	100,0	100,0	100,0
N	151		132	

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVÈGE

It is well known that Norwegian students abroad are more likely to have parents who have had their own experiences from living or studying themselves abroad. (Wiers-Jenssen 2003). This is also the case among students at the two programmes. Around 43 percent of the students had parents with such experiences abroad. The shares are surprisingly similar among INSA and UT1 students.

3.4.1 Geographical recruitment pattern

Since 1990, SUHF has kept track of which secondary schools students attending the Toulouse programmes are recruited from. The number of students in this period was 422. Of these, 32

had a background from a French secondary school (lycée). This evidence also shows that students are predominantly recruited from the biggest agglomerations in Norway, and within these, from the schools which are most renowned for quality within the comprehensive studies (cathedral schools etc.). We see from the following table that 35 percent of the students originated from Oslo and Akershus, and 12 percent from Hordaland (where Bergen is located). From Nord-Trøndelag, Sogn og Fjordane and Finmark there have practically not been any student so far. Also the other counties in the regions are very modestly represented.

Table 3.4 Geographical dispersion of Norwegian students by the localisation of their upper secondary school. Total number of upper secondary schools, total number of students and students' share. INSA and UT1 from 1990 to 2005.

Counties	High schools (N)	Students (N)	Students' share
Akerhus	17	60	14 %
Aust-Agder	5	10	2 %
Buskerud	6	20	5 %
Finmark	0	0	0 %
Hedmark	3	15	4 %
Hordaland	13	51	12 %
Møre og Romsdal	6	9	2 %
Nord-Trøndelag	1	1	0 %
Nordland	5	7	2 %
Oppland	5	11	3 %
Oslo	18	87	21 %
Rogaland	7	26	6 %
Sogn og Fjordane	0	0	0 %
Sør-Trøndelag	8	24	6 %
Telemark	4	10	2 %
Troms	3	8	2 %
Vest-Agder	3	12	3 %
Vestfold	7	20	5 %
Østfold	8	19	5 %
French Lycées	9	31	7 %
Other	1	1	0 %
Total	129	422	100 %

Source: SIU/SUHF

3.5 Information strategy

In addition to the information procedures common for international student mobility related activities, such as information on Internet, ads in the daily press, educational fairs (usually six or seven per year) and through the distribution of posters and brochures, a considerable amount of time is invested in dialogue based and consultative activities. In contrast to what is

the case for the bilateral student exchange programmes in higher education, the information of the two programmes has to be directed towards pupils in secondary schools and they are geographically dispersed and difficult to reach efficiently. From the experience SUHF has gathered over the years, it is difficult to rely on the school teachers for the spreading of information material. There may be a conflict of interest between the French and the science teachers that makes the reception difficult. There are many examples of especially French teachers at some upper secondary schools that SUHF has cooperated well with, but generally, it is difficult to get much attention by teachers. But by using primarily the French teachers, one misses many science pupils who are not in the French classes and who would expectedly enjoy studying either at INSA or at UT1. As a consequence, since the autumn semester of 2004, SUHF gave priority to science classes.

Despite of these difficulties, SUHF rely upon enthusiastic teachers in French to dispatch information. Every year, a team consisting of programme officer, former students and a teacher from one of the French institutions are paying visits to secondary schools. They usually cover 15-20 schools per year. During six days in 2005, SUHF visited 24 schools (24.-31.10.2005). However, at the school visits carried through since autumn semester 2005 SUHF has prioritised the providing of information to the school advisors. A Powerpoint presentation was prepared for these meetings and the advisors also got a copy of this presentation as well as Norwegian brochures of the two programmes.

Certain schools in the urban areas of Bergen, Oslo and Stavanger are most frequently visited since they to a larger extent have motivated pupils as well as supportive teachers.

Many students reported that the study advisors at secondary school had lack of knowledge about the programmes. Except one or two students, none had seen informative posters on studies in Toulouse hung on the notice boards of their upper secondary school. Regarding the INSA video (made by former students), students complained that it was out of fashion. They argued that it was not serving the purpose of attracting more students, rather the opposite. Some also argued that the information one receives before going was too positive. Prospective students should be better informed about the studies and style of French pedagogy, in order to prevent them from being negatively surprised.

Furthermore, the students argued that sending professors who don't speak English to Norwegian schools is of no use.

“It is fine to visit classes, but what is said and done should be different. They don’t appear professional enough”, commented one respondent.

Professional PR people should be used to make a presentation programme, and then students should be used, because they are the ones who can most easily talk to Norwegian students at Norwegian high schools.

Students also experienced that valuable information about the programmes came through interpersonal networks.

Table 3.5 To what extent did information from the following sources contribute to you wish to apply to the programme? INSA and UT1. Percent

	To great extent	To fair extent	Very little	Nothing	Total
Posters at high school/university	22,9	15,8	10,8	50,5	100,0
Encouragement from family	15,1	25,8	20,8	38,4	100,1
Encouragement from friends	14,7	22,2	25,1	38,0	100,0
Encouragement from former students	17,2	16,1	20,8	45,9	100,0
Information from SUHF/SIU	23,3	29,4	22,6	24,7	100,0
Visits to study fairs	26,9	17,9	12,5	42,7	100,0
Information from visits to school	18,3	8,6	6,1	67,0	100,0

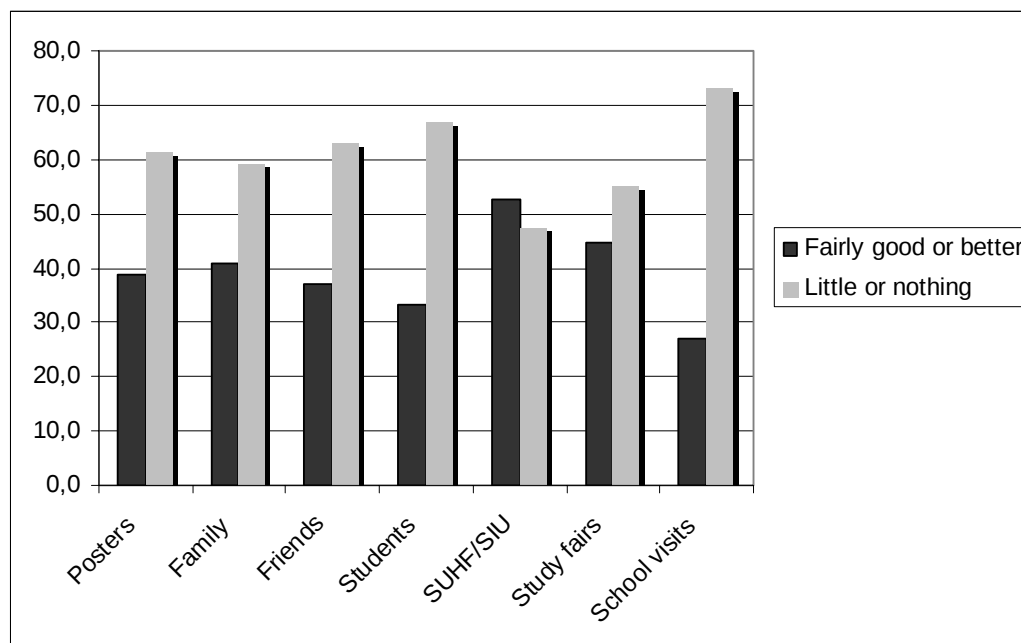
Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

Some different sources of information are ranged from “to a great extent” to “nothing”, with four choices all together. It appears that the more “formal” and organised sources of information range higher the “informal ones” (e.g. school visits and study counsellors at upper secondary school). It is perhaps a bit surprising that posters at upper secondary school/university ranked this high: It was hardly anyone from the interviews that had received information from their upper secondary schools that contributed to their wish to apply. Perhaps this was better before than it is now? We have grouped the two answer categories “to a great extent” and “to a fair extent” in one, and did the same with “very little” and “nothing”. These form the basis of the following figure which shows these results more clearly.

Students from the two programmes responded relatively equally to these questions and have generally the same response patterns. Their responses diverge on two issues. The first is to what extent family has encouraged them to apply. For INSA-students, 31 percent had influence from family “to a great extent” or “to a fair extent”. The corresponding figure for UT1-students is 40 percent. Also the degree to which school visits contributed to application also differed among the two groups of students. Around 32 percent of the INSA-students responded that school visits had contributed “to a great extent” or “to a fair extent” to their

wish to apply. The corresponding figure for UT1-students was 21 percent. We do not have any good explanation to why these differences are manifest.

Figure 3.1 To what extent did information from the following sources contribute to you wish to apply to the programme? Percent



Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

Some of the French professors interviewed argued that in making PR for the programme, they must advise Norwegians to come for 3 or 4 years to earn a bachelor (which takes 4 years at UT1 because of the one preparatory year). This is particularly the case for UT1, which has had an increase of one year to achieve the Master degree after the reform. If students pursue their studies to pass a Master, it is fine, but one should not expect youngsters to commit to spend 6 years in a foreign country upon leaving upper secondary school, they argue. The strategy of selling a full Master programme probably chases more students than it attracts, and is therefore not fruitful. However, SUHF always inform potential applicants about the flexibility of the programmes such as possibilities of taking part in student exchange programmes or to take a Master at another university.

This years' information strategy of SUHF is somewhat changed. Brochures will be sent to all comprehensive upper secondary schools in Norway and the information on SIU's web pages will be updated continuously. Six days will be reserved for meetings with study advisors at various secondary schools in Bergen, Oslo and Stavanger. One officer from SUHF and one

teacher from INSA shall participate at these meetings. As a follow-up, the plan is to ask present students to provide information and visit classes at their home secondary schools when returning for Christmas holiday.

SUHF will also organise stands at education fairs. This strategy has been criticised by SIU, deeming it too costly. But leasing agreements for stands at educational fairs in 2006 are already made. So from 2007, SUHF will probably have to work without stands at the educational fairs. But according to the students, many have received valuable information from educational fairs, and they constitute an important arena. Surveys undertaken by NIFU STEP also show that educational fairs and information meetings are of great importance in this respect (Wiers-Jenssen 2003).

Compared with the results obtained in terms of number of applicants and students recruited, the information strategy of the two programmes must be said to be rather inefficient and costly. It involves heavy travel expenses both on French and Norwegian side since students and professors from both universities take part in the promotion trips (professors' travel expenses are covered by UT1 and INSA). Such bad results are partly due to various general structural, cultural and practical problems that are difficult to overcome. The same also goes for many other international study programmes, for instance ERASMUS, there is no guarantee for the written and visual (paper based) information to actually be spread locally. Study advisors at upper secondary schools do not seem to be particularly interested in international activities of this kind. This was even the case when representatives for the programmes met at the annual counsellors meeting to inform about the programmes. At Norwegian upper secondary schools both printed and electronic information seem to "drown" in the ocean of other massive information campaigns. Bearing in mind the barriers to student recruitment, dissemination of information on study opportunities in France really is a serious challenge.

NIFU STEP recommends achieving better dissemination of information through more active use of students. Our investigations also confirm that interested students/potential candidates find it easier to talk to student representatives than to university professors or, even, programme officers. However, SUHF and SIU should develop their understanding of the importance of information having the right appeal to the target groups. A more updated video and/or DVD could be produced, preferably with professional assistance so that the message would reach this demanding audience in upper secondary school. It would be an expensive, but valuable investment that would have a payback period of many years.

Table 3.2 *How did you experience the entry examinations? They were... (percent)*

	INSA	UT1	Total
Very hard and difficult	1,3	0,8	1,1
Rather hard and difficult	18,1	8,5	13,7
Average	38,3	30,2	34,5
Rather manageable	35,6	40,3	37,8
Very manageable	6,7	14,0	10,1
No opinion	0,0	6,2	2,9
Total	100,0	100,0	100,1
N	149	129	278

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

The entry examinations are rather different for the two programmes. Potential UT1-students have to go through a test in mathematics, one interview in French, and have since relatively recently made the applicants respond to a test in “logic” (i.e. a test resembling an IQ-test). INSA-applicants have a test in mathematics, one in physics, one in French and one oral interview (in French). As it appears in the table, there were more INSA-students who found the entry examinations hard and difficult, than among the UT1-student. Note that applicants who did not enter one of the programmes are not in the survey.

Table 3.3 *How did you perceive the organisation of the entry examinations in Norway? It was... (percent)*

	INSA	UT1	Total
Very good	39,6	20,2	30,6
Rather good	49,0	48,8	48,9
Average good	7,4	22,5	14,4
Bad	2,0	0,0	1,1
No opinion	2,0	8,5	5,0
Total	100,0	100,0	100,0
N	149	129	278

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

We asked the participants of the two programmes how they perceived the organisation of the entry examinations in Norway. The respondents were overwhelmingly satisfied and nearly 50 percent of the respondents of both programmes said they were rather well organised. Almost 40 percent of INSA-students said they were very well organised (20 percent of the UT1-students responded that), while more than 20 percent of UT1-students said the organisation of the entry examinations was average (only 7 percent of the INSA-students responded that).

3.6 French-Norwegian relations as a result of the Norwegian programmes in Toulouse

Studying abroad serves many purposes: In addition to the investment in education, language/cultural skills and future career at the individual level, comes the development and maintenance of knowledge, skills and networks of cross national collaboration in business and culture. France is Norway's third largest market for export. As already mentioned in chapter 1, the establishment of the two study programmes in Toulouse were also a result of an agreement on economical, technological and scientific cooperation between France and Norway.

According to the programme officers as well as the founder of SUHF, Rolf Tobiassen, the two programmes contribute to broaden the spectre of cultural impulses to Norwegian graduates. It was pointed to the general need of the Norwegian society to supplement the influences we receive from the Anglo-Saxon countries. In comparison with our export of students in economy and technology to North-America, Australia and the UK, studying such subjects in France is rather rare for Norwegians. It was argued that this alternative study track in itself represented a quality since it contributes to more variety in the qualifications of the candidates. Despite the fact that France holds research in technology of very high quality, in Norway, France and Roman speaking countries in general are traditionally not much associated with such qualities. It seems obvious that the research communities in Toulouse generally hold very high quality. A side effect of the NORGINSA agreement is that it also opens up for civil engineer candidates from the NTNU to further education in space technology (an agreement was passed between the CNES and NTNU, facilitated by INSA). The educations offered in the two programmes are relevant for trade, not only related to France, but for the entire French speaking area including many African countries.

Furthermore, the cultural value added to the Franco-Norwegian relation because of activities related to the programmes, should not be underestimated. In honour of the Norwegian community in Toulouse, every year the Norwegian national day (17th May) is celebrated in the city hall, and the French enjoy taking part in the celebration. All in all, the students themselves, the 17th May celebration in Toulouse, attention from Government, Prime minister (Bondevik) and ambassadors, the visit of the Royal family, arrangement of Norwegian culture week with artists participating etc., are symbolic rituals important for a sustainable relationship between the two countries.

3.7 Special qualities gained

According to the professors in Toulouse, the Norwegian students are very handicapped by language barriers at the beginning. But after a while, they improve greatly. They have problems writing, both lacking terminology and pure language knowledge, but also to group ideas and structure a written piece of argumentation. They are also generally unable to take notes during classes and lack an efficient study methodology. They have difficulties in theoretical mathematics, and in working with abstraction in scientific subjects generally. The level of Norwegians is not necessarily lower, but it is different since maths in Norway is taught in a completely different way, through applications. However, it was the opinion of all the professors we interviewed that Norwegian students in Toulouse generally are serious, work hard and progress well. The professors also appreciate having Norwegian students in their classes. Due to their different background, they are more active and ask questions that force the professors to think. That is generally favourable for both the teacher and for the other students, and is thus profitable for the entire class. French students also become more active when they are in classes with active Norwegians, and the entire pedagogical environment becomes better.

One of the informants among the staff at INSA expressed it the following way:

The Norwegians have some special qualities; initiative-taking, group-working, individualists, able to "solve problems", flexible and reasoning - that they don't need the two first years, but when they enter third year, these qualities become important and they can bring them along there, together with the qualities they have obtained during these two first years. Norwegians often "take off" the third year.

A majority (84 percent) (both from INSA and UT1) responded that they were very or fairly pleased with the academic quality of the lecturers as well as the curricula (67 percent). Regarding the pedagogic quality however, a significant amount were very or fairly dissatisfied (44 percent). Similar tendencies are also found in previous studies showing that Norwegian students in France, compared with other Norwegian students abroad, are less pleased with the pedagogical quality (Wiers-Jenssen 2003).

Some professors at UT1 emphasised that Norwegian students should learn about French culture - a more complete learning than what is useful merely for the studies. At INSA, there is less time for "general culture". Professors from UT1 argued that this also was less important for engineers than for economists, but for the latter, written language and cultural

knowledge are issues which are more part of their subjects, and there is much focus on such things during the preparation year.

Asking the students why one should study in France, students from both programs typically emphasised the importance of learning the language and about French culture. It was a good thing to enter a “safe” Norwegian programme that was secure and that they could trust. The programmes are financially favourable (in comparison with English-spoken areas for instance). They wished to develop a key skill, and had heard that many employers found it attractive to hire foreign students because they show a true initiative and willingness to be something special. But first and foremost they do this for their life experience and not because it looks good on their CV.

It was great and thrilling to live in France, and to experience what it is like to live in France. UT1 students thought it was “unbelievable” that so few apply for such a good programme.

3.8 Experiences from the labour market

According to the results of the survey of former students, the majority had planned to return to Norway after graduating in Toulouse. The address book of former NORGINSA and ACTION NORVEGE students uncovers that these candidates are typically recruited to well-known companies, commonly international (for instance Schlumberger, Accenture, McKinsey) or international oriented Norwegian companies (Hydro, Statoil). Some of the candidates have international careers, in the sense that they are working abroad for foreign companies. Many different industries are represented; consulting, research and laboratory work, the oil & gas and engineering companies, to mention some of the most important. Some of the candidates have been recruited to highly advanced technological activities, for instance Kongsberg Aerospace and Defence.

3.8.1 Entering the job market

The following two tables show that the transfer from studies to employment was rather quick for candidates from these two institutions. It was also perceived as fairly easy to find employment after graduation, particularly for the candidates from INSA.

Table 3.3 *How much energy was needed to get a job?*

		Very much	Rather much	Tolerably much	Not much	I got a job nearly without efforts	Total
INSA	N	7	13	22	29	32	103
	%	6,8	12,6	21,4	28,2	31,1	100,0
UT1	N	10	19	20	19	11	79
	%	12,7	24,1	25,3	24,1	13,9	100,0
Total	N	17	32	42	48	43	182
	%	9,3	17,6	23,1	26,4	23,6	100,0

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

Table 3.4 *How many months did it take you after graduation to find a job?*

	Mean	St.deviation	Minimum	Maximum
INSA	1,69	3,036	0	15
UT1	1,63	3,001	0	15

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

Those who spent more than half a year either had their military service, they travelled a year, or for some reason, did not try very hard. The overall picture is that these graduates do find jobs rather quickly.

The majority does not believe that entering the job-market with a corresponding Norwegian education would have been more beneficial.

Table 3.5 *Do you think it would be easier to get a job with a comparable Norwegian higher education?*

		Yes, very likely	Yes, probably	No, hardly	No surely not	I don't know	Total
INSA	N	3	9	48	26	17	103
	%	2,9	8,7	46,6	25,2	16,5	100,0
UT1	N	3	19	30	8	19	79
	%	3,8	24,1	38,0	10,1	24,1	100,0
Total	N	6	28	78	34	36	182
	%	3,3	15,4	42,9	18,7	19,8	100,0

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

Table 3.6 *How do you feel Norwegian employers appreciate this study programme?*

		Very positively	Rather positively	Comparably with Norwegian higher education	Rather negatively	Total
INSA	N	13	47	41	1	102
	%	12,7	46,1	40,2	1,0	100,0
UT1	N	2	35	32	9	78
	%	2,6	44,9	41,0	11,5	100,0
Total	N	15	82	73	10	180
	%	8,3	45,6	40,6	5,6	100,0

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

Over half of the respondents perceive that Norwegian employers have a fairly positive or very positive valuation of the study programmes, approximately 40 percent believe they are valued equally to corresponding Norwegian education.

3.8.2 Advantages of studies

A vast majority believe that the experiences and competence gained in Toulouse affect their way of thinking and working. It is difficult to point exactly to how these changes affect their professional and personal lives. However, in the survey we asked to what extent the years of study in Toulouse have led to advantages in the labour market and personally, compared to if the students had pursued similar studies in Norway. We must then assume that the respondents compare their possible advantages and disadvantages with those possibly obtained by studying at NHH or NTNU, the two “standard” alternatives these students have. When interpreting these results, one should bear in mind the tendency of students (and professions) to uphold the status of one’s most immediate institution of higher education. Having said that, as we shall see from the results presented below, the respondents also point to certain disadvantages from having an educational background from UT1 and INSA. Frequency tables of all advantages and disadvantages asked for in the survey are included in an appendix of this report.

Not surprisingly, a large amount responded that the study stay in Toulouse to a large extent had led to advantages at the labour market and personally with respect to knowledge of the French language (87 percent) and culture (86 percent).

Furthermore, the response patterns shows that the years in Toulouse to a large extent had increased their possibilities to achieve an international career (59 percent), enforcement of the personality (56 percent), improved their perspective on Norway and Norwegian issues (62 percent), ability to work under pressure (48 percent) and ability to absorb new knowledge quickly (41 percent).³

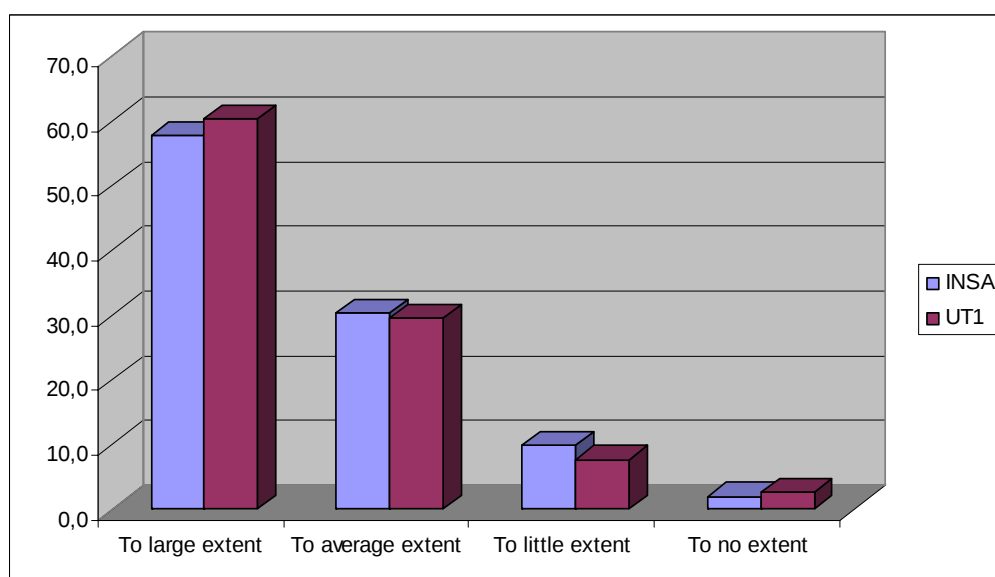
Given the substantial differences between the study programmes of INSA and UT1, the similar pattern of response to these questions is somewhat striking. Of course, some of the qualities gained are general ones such as knowledge of French culture and language. Most likely, this can be explained by the major differences in pedagogical traditions between higher

³ As the figures also show, a significant number also respond that the study time in Toulouse had, to an average extent, increased their possibilities according to the abovementioned qualities.

education in France and in Norway. Such national differences might also to a certain degree explain why many responded that the study years in Toulouse to little or no extent had been an advantage in relation to competencies like “greater ability to transforming theory to practice”, “ability to work productively in teams”, “ability to mobilise others’ resources” and “ability to use information and communication technologies (ICT)”.

Figure 3.1 *To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)*

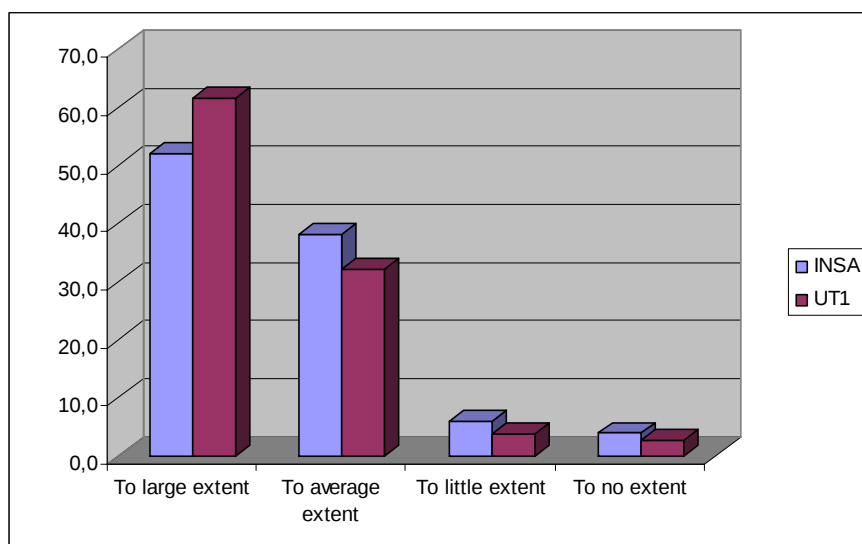
Increases the possibilities to achieve an international career



Source: Survey among present and former Norwegian students at INSA and UT1

Figure 3.2 *To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)*

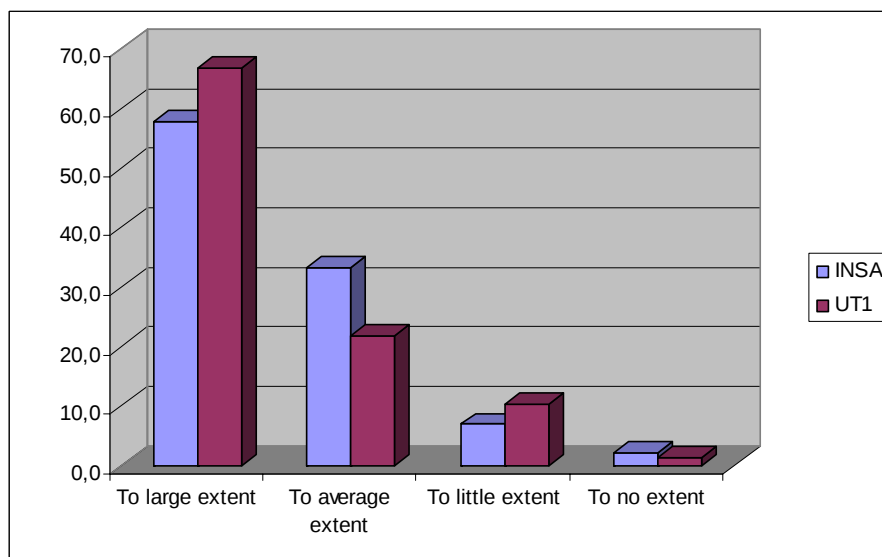
Enforcement of the personality



Source: Survey among present and former Norwegian students at INSA and UT1

Figure 3.3 *To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)*

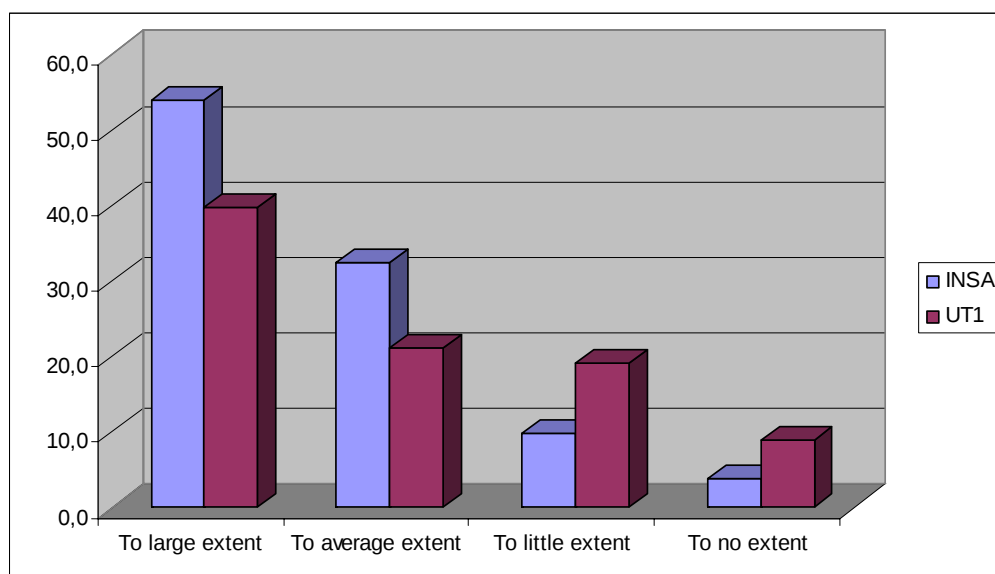
Improved their perspective on Norway and Norwegian issues.



Source: Survey among present and former Norwegian students at INSA and UT1

Figure 3.4 *To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)*

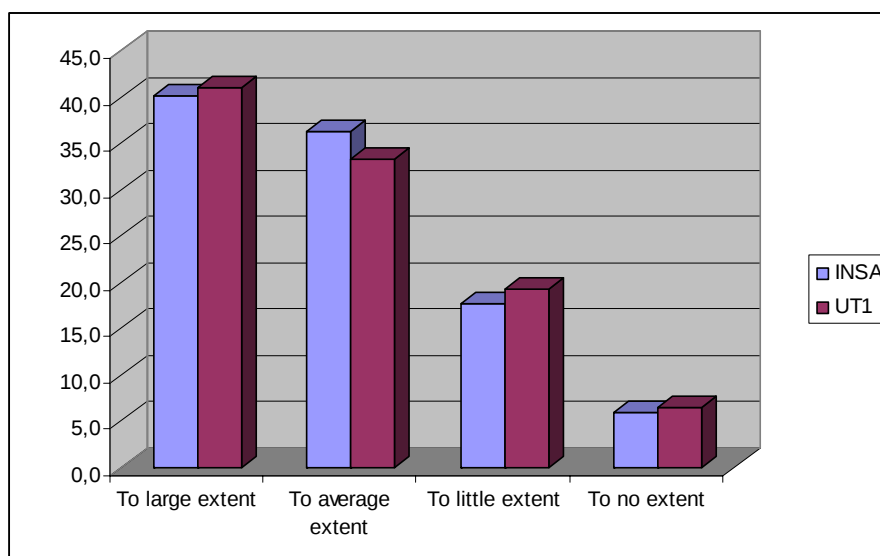
Ability to work under pressure.



Source: Survey among present and former Norwegian students at INSA and UT1

Figure 3.5 *To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)*

Ability to absorb new knowledge quickly.



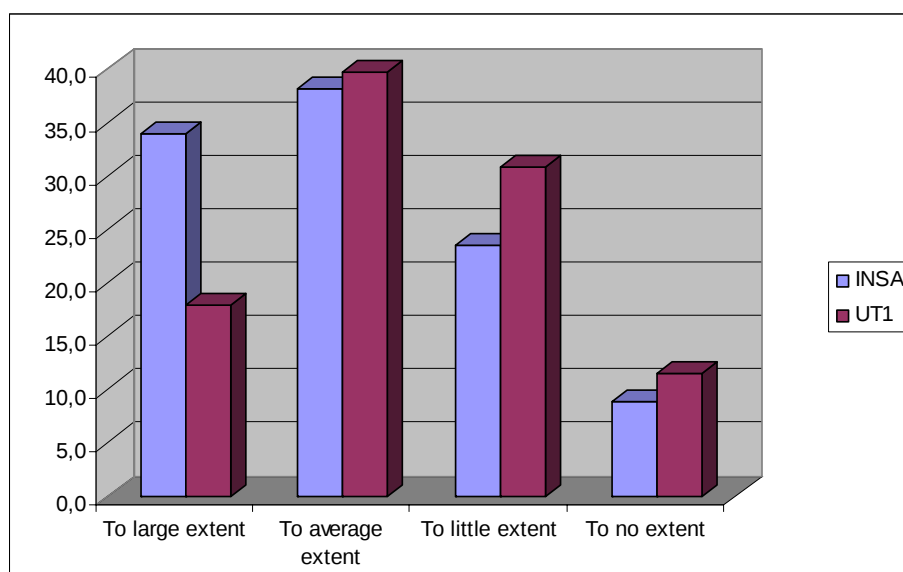
Source: Survey among present and former Norwegian students at INSA and UT1

3.8.3 Differences between INSA and UT1 candidates and students

However, regarding advantages in the labour market, we found some significant differences between the respondents from INSA and UT1.

Figure 3.6 To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)

More knowledge and theoretical skills.



Source: Survey among present and former Norwegian students at INSA and UT1

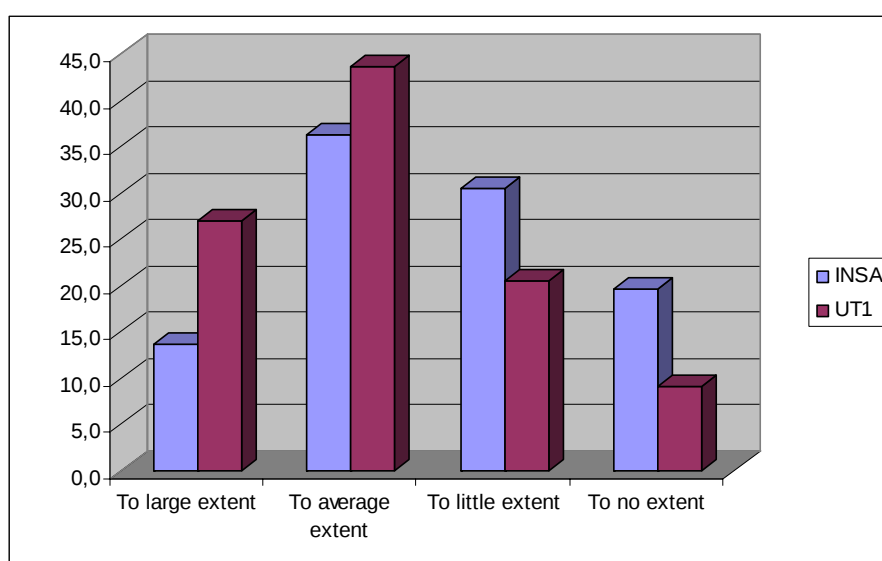
The INSA candidates responded to a larger extent that the study stay in Toulouse had lead to advantages concerning “ability to work under pressure” (54 vs. 40 percent) and with respect to “more knowledge and theoretical skills” (34 vs. 18 percent).

The UT1 candidates to a larger extent than the INSA candidates responded positively on whether the study stay had lead to advantages concerning “improving perspective on Norway and Norwegian issues” (67 vs. 58 percent) and “enforcement of the personality” (62 vs. 52 percent). It is also interesting to note the differences between INSA and UT1 candidates regarding their “ability to plan, organise and coordinate activities” (UT1: 17 percent vs. INSA 10 percent). This pattern also applies to the question to what extent the study years in Toulouse had lead to disadvantages in the labour market, where 33 percent of the UT1 as opposed to 9 percent of the INSA candidates experienced exclusion from important networks. 23 percent of the UT1 candidates as opposed to 6 percent of the INSA candidates responded that the study stay in Toulouse to a great extent had lead to disadvantages with respect to lacking knowledge of Norwegian employers and work in the Norwegian labour market.

Furthermore, 27 percent of UT1 candidates as opposed to 14 percent of the INSA candidates respond that their educational background from Toulouse to a large extent had lead to “modest possibilities in Norway to exploit language and culture skills”. It is reasonable to suggest that the differences in response pattern between candidates from INSA and UT1 to a certain extent reflect the different competence needs in the field of practice of engineers vs. business administrators. For instance, the need for cultural, intercultural and communicative skills might be far more important for the business administrator, the technical skills more important for the engineer.

Figure 3.7 *To what extent your study sojourn in Toulouse has led to disadvantages at the labour market and personally, compared to what you think you would realise through comparative studies in Norway. Percent (N=180)*

Modest possibilities in Norway to exploit language and culture skills.



Source: Survey among present and former Norwegian students at INSA and UT1

3.8.4 Employers' knowledge of the programmes

A majority respond that they have the impression that Norwegian employees lack knowledge of the study programmes in Toulouse.

Table 3.7 *Does it seem that Norwegian employers know the programme you followed in Toulouse?*

		Yes	They often know a little about it	They rarely know about it	No	I don't know	Total
INSA	N	3	23	42	24	10	102
	%	2,9	22,5	41,2	23,5	9,8	100,0
UT1	N	1	8	34	24	11	78
	%	1,3	10,3	43,6	30,8	14,1	100,0
Total	N	4	31	76	48	21	180
	%	2,2	17,2	42,2	26,7	11,7	100,0

Source: Survey among students previously or presently engaged in NORGINSA or ACTION NORVEGE

We also raised the question of the value of these candidates to human resource managers in some of the large Norwegian companies. They all underlined the need for employees with good knowledge of French language and culture (in addition to technical skills). The typical level of upper secondary school French does not serve the need to cooperate and communicate well with French speaking trade partners or colleagues. One needs a good understanding of the many nuances of the language. There is an increasing importance of global trade in general, and in relation to amongst other oil and gas markets in France and other areas using French language in particular, such as the north of Africa. Some of the informants stressed that this development most likely will increase the demand for candidates with foreign educational background and solid language/cultural skills in the years to come.

The human resource managers we interviewed argued that the higher education institution is only one out of many different factors considered when recruiting. Nevertheless, it was said that candidates from INSA and UT1 in Toulouse are always interesting since they are, after all, educated at one of the best HE institutions in Europe. For instance, one of the informants claimed that business education studies at UT1 were seen as comparable with the London School of Economics (LSE).

Not all, however, had good knowledge of the programmes. Some of them underlined the wish for more information about the programmes. One suggested that SIU could send information directly to the human resource managers/divisions at the relevant companies for instance by disseminate a simple link to a web page. Within Norwegian industry today there is great competition over talented candidates with international background from engineering and business administration. Against this backdrop, one informant suggested that particularly able students attending the programme could be promoted for summer jobs. Another informant suggested to market the programmes to relevant employers for instance by coverage in newspapers and magazines like Dagens Næringsliv, Finansavisen, Kapital, Kaleidoskopet. Timing is also important, for instance this informant claimed that SIU should be particularly aware of the periods for recruitment of new trainees in large companies.

3.8.5 Marketing of the candidates

Despite the increasing importance of global trade and industry including areas using French language, this investigation indicates that Norwegian employers have a lack of knowledge of the programmes. Candidates also report lack of possibilities to utilize their knowledge of

French language and culture. As a consequence, a better profiling strategy for marketing the programmes could be developed. By this we refer to marketing of the candidates to potential employers (for instance in Norwegian business newspapers and magazines) as well as the need for communicating the special qualities gained (knowledge of French language and culture, analytical skills, ability to work under pressure, more knowledge and theoretical skills, *et cetera*), for instance expressed in bullet points in the brochures. Even though INSA and UT1 candidates have different experiences regarding the advantages and disadvantages of studying in Toulouse, the candidates from INSA seem professionally to benefit the most. This does not necessarily imply more emphasis on the marketing of UT1. Regarding the viability of the program in a long term perspective, both could benefit from a more profiling marketing strategy.

3.9 Synergies from the two programmes

Two well-known institutions in Toulouse share experiences from having hosted Norwegian students.

For attention to Toulouse and political and cultural synergy (consul, ambassador, 17th May etc) there are obvious synergy effects. Given the two agreements, the size of the Norwegian group in Toulouse becomes bigger and the population of the city has taken interest in Norway.

Norwegian students from the two institutions usually get to know each other since some common activities for freshmen are usually organised; bus excursions, cultural events, visits to restaurants. The local ANSA chapter also contributes to social relationships although students from ANSA (currently) participate less actively than those from UT1 in this association. Apart from that, the localisation of the two programmes in Toulouse is not important for the Norwegian students since they mostly socialise with French and Norwegian friends at their respective institutions.

For SUHF it is a great advantage since cost efficiency is reduced because the marketing and recruitment is done together. The fact that the recruitment work from the French side is coordinated and that the two programmes cooperate well is also a synergy effect that originates from the co-location of the two higher education institutions. For instance this autumn, UT1 is unable to go to Norway to the school visits, and then the INSA representative and the SUHF representative will provide information from both programmes.

3.10 Financial issues and costs of the programmes and the change of funding from the State Educational Loan Fund (Lånekassen)

When the programmes were designed and implemented, it was clear that the Norwegians needed special education based on their level and previous schooling in order to make them able to enter the French higher education teaching at more or less the same footing as the French. Different financial models were discussed, and it was decided that the real costs of the programmes should be charged the students directly as “tuition fees” for participating at the programmes. With the rules of Lånekassen at the time, the students would then be covered 100 percent by the “tuition fee scholarship” (gebyrstipend), and these costs would then be borne by the Lånekassen. Such a system would make the students responsible because they would see by themselves what the real costs of the programmes are, and it would be easy to organise. A system by which SUHF would transfer the costs of the programmes to the institutions was discarded because it would be more complicated to finance organisationally, and it was expected that the students would be less aware of their chance to participate in the costly study programme.

At both INSA and UT1, special “conversion” programmes were designed to achieve this. At both education institutions, the Norwegians are offered a special French course in Toulouse during the summer preceding their first academic year in Toulouse. They are entitled to receive a language scholarship from Lånekassen of NOK 15.000,- and the costs are therefore not enormous (the INSA course costs €750 and the UT1 course costs €550).

However, despite the fact that SUHF provide information about the grant to language courses, for instance in the study brochure, students (at UT1) reported that this information was not adequate. A “central” application from SUHF to this grant would be helpful, they argued.

At INSA, the Norwegians have a special first year, where much emphasis is placed on mathematics and some topics of physics and chemistry, in addition to French. Then in the second year of studies they are integrated in the most important subjects. They nevertheless have special classes in both the second year and third year of studies, as a support to the normal classes, and are specially tutored by the lecturers. The costs for the first three years are €9.000, €7.000 and €3.000 for first to third year, respectively. In Norwegian kroner, and with an exchange rate of €1 = NOK 8, the total costs add up to NOK 152.000,-. With the previous system of Lånekassen, these fees were covered in full for UT1 and 90 percent for INSA students. After the revision of the rules in 2004, the tuition fee scholarship has been replaced by a mixture of scholarship and loans. For tuition fees up to NOK 52.320,-, 50 percent is

given as scholarships and 50 percent as loans. The exceeding sums are loans. For INSA students, the change of rules in Lånekassen results in a total loan of NOK 87.680,- over the three first years.

At UT1, there is also a special support programme for the first three years. The “preparation year” is organised before the first year of studies, so the Norwegians start the first year of studies after having been in Toulouse for a full academic year. This year prepares them in French and mathematics, but there are other subjects that will give them the possibility to be well prepared to enter first year of studies. At UT1, the support is also given up to the first three years. The costs for the first three years are € 5.800, € 1.500 and € 1.150 for the first to third year, respectively. This adds up to NOK 67.600,-. With the current rules of Lånekassen, the students are granted NOK 33.800,- as a loan, while the remaining is granted as scholarships.

During the interviews, the students expressed frustration about these change of rules that led to increased costs. At INSA, where the costs have increased the most, several of the more advanced students said that they would not have applied if the costs were at the present level at the time when they applied. The alternative, they argue, is engineering studies for free at NTNU. For the INSA-students who have started after the change, the attitude is different. They are upset because they have to pay more than their more advanced countrymen, but say that they think the experience and schooling they receive are worth the extra costs. They nevertheless imagine that some potential applicants may have decided not to apply because of the costs. They do not understand that they are charged these costs when they hear that “Norway needs them” and that French-speaking engineers are important to the Norwegian labour market. They say that a mistake must have been made somewhere. In light of the recruitment challenges to the programmes, they say that this is an issue that should be rectified, because it seriously threatens recruitment. Another threat, maybe even more serious, is that the travel scholarship within Norway has been removed. People from remote areas have to cover their extra travel expenses themselves. They say that regional representation surely will be weaker in the future, especially when it comes in addition to the extra costs from the loans to cover tuition fees.

At UT1, where the problem of the costs is less of a problem, students say that they wouldn't make this extra cost affect their interest in coming to Toulouse. But they imagine that it can be discouraging to some that may not apply because of this. They are nevertheless upset that their older colleagues got away with paying less than they have to.

But they see the removal of the travel expense scholarship for Norway as a much more serious problem. It was said that students living in regions like Northern Norway will have seriously higher travel expenses than people who live centrally in Norway. An even more skewed regional recruitment pattern to studies in Toulouse and elsewhere could be the result.

3.11 The N+I programme. Could it substitute or complement NORGINSA?

N+I is a French engineering programme for foreigners. The purpose of the programme is to teach foreigners in the French engineering schools, with more or less the same aims as for NORGINSA, i.e. that foreigners shall learn French and French culture through higher education and thereby become flexible labour, useful for both the French labour market and for international labour markets with an ability of working with French-related issues. N+I is a Master programme. Students are expected to pass the Bachelor degree in other countries, and they integrate French higher education institutions at the Master level. The foreign students have a preparation semester (in French and mathematics), and are sent to different schools all over France according to the speciality they choose (every participating institution is given the responsibility for one or several topics and become the "standard" receiving institution for students who choose their specialisation field). The group of foreigners is thus spread out all over France after the common specialisation course is ended.

The people we interviewed at INSA think that N+I is not a good substitute for NORGINSA. The preparation is too short, and it is difficult for many to manage at Master level after that. Moreover, there are no synergy effects from a national group (neither among the students or staff) as what is obtained at NORGINSA. Rolf Tobiassen explained to us that the experience SUHF had with Master level students was disappointing. Norwegians at post-Bachelor level were generally not able or willing to mobilise all the energy and perseverance needed to be at an acceptable level in French terms, nor to make themselves acquainted with the French education system to the extent necessary to be able to benefit from such a system. It was on the basis of this experience that the post-secondary school model of NORGINSA and Action Norvège were implemented, and it does not seem fortunate to go back to a model like N+I now.

3.12 The two programmes in light of the Quality Reform

The majority of Norwegians studying abroad choose to stay in an English speaking country. An important goal of the central educational authorities is, however, to achieve a better

geographical distribution. It is likely to believe that the two programmes, NORGINSA and Action Norvège, contribute to the fulfilment of such a goal since many of the students who have studies here would not have gone to France without the existence of the programmes in Toulouse. However, increasing their emphasis on internationalisation of higher education, the educational authorities now give priority to “mass programmes” for student exchange, of which the European programme ERASMUS can serve as a prominent example. Such programmes enable students to have shorter sojourns abroad, usually during one or two semesters, to attend courses at a foreign university as part of their degree. Against this backdrop we shall discuss the viability of the programmes in a long-term perspective. An important issue to address is whether or not the two programmes could be expanded and if so, in what manner.

The educational authorities in Norway want to raise the level of competence in the natural sciences. Besides, raising the number of qualified applicants to NORGINSA and Action Norvège should be possible. Against this backdrop, expansion should not be sought attained by making similar agreements and programmes in other disciplines, such as art or psychology.

In their planning for the future, SIU could consider the possibilities for collaboration at a Nordic level in order to raise the number of qualified applicants. Confronted with such an idea, however the lecturers in Toulouse argued that such an arrangement would be more resource demanding since the programmes had to be adjusted to the different Nordic learning traditions and curricula, and since they had to develop relations to institutions in many different countries. Nevertheless, as far as our knowledge goes, concerning pedagogic and language, the differences between Scandinavian countries (Denmark, Norway, Sweden) are rather small in this respect.

It is important to bear in mind however, that expansion requires more resources mobilised at the French side – not the least to marketing and networking activities – something which is not necessarily straightforward, given their local organisation of the programmes.

Should the programmes be adapted to also accommodate Norwegian students on short-term exchanges, for example one semester through the ERASMUS programme?

According to the goals of the Quality Reform all students in higher education should be given the possibility of having a sojourn abroad as part of their (Norwegian) degree studies.⁴

⁴ St.meld.nr.27 (200-2001) Gjør din plikt - Krev din rett. Kvalitetsreform av høyere utdanning. Ch.7. Det kongelige kirke- utdannings- og forskningsdepartementet.

According to the Governments proposal on this issue, too many Norwegian students take expensive degree studies abroad, a trend which does not contribute to improve the internationalisation of the domestic academic milieus. Further development of bilateral agreements with higher education institutions abroad should therefore contribute to a greater inflow of foreign students to Norway as well as to increase international collaboration between scientific employees. In that respect the policy builds upon the idea of the EU based exchange programme ERASMUS (sorting under SOCRATES) although the European dimension is not an explicit part of the international policy of the Norwegian educational authorities.

Nevertheless, the goals and features of NORGINSA and Action Norvège do not match very well with these policy goals. Based on our knowledge of the barriers foreign students need to go through and overcome if they are to benefit from higher education in France, we will argue that a stay of one or two semesters is inadequate for fitting into a (Norwegian) degree study. Even though programmes like ERASMUS are neatly designed for the efficient implementation of student mobility, we consider the language barriers of the students in economy and technology generally too important to be able to benefit from shorter sojourns in countries other than English speaking ones. That is not compatible with the intentions of the Troll agreement and with those who argue that a more heterogeneous cultural influence to Norway is valuable in itself. In addition one must consider the considerable differences between the Norwegian and French higher education system; culture, content and ways of teaching and evaluating the students. One of the professors expressed it as follows:

“One cannot compare this programme with ERASMUS. The fact that they go so far into French culture and language, and become “French” in many respects is a real advantage for them and for Norway. These students are real ambassadors for Norway in France and for France in Norway”

4 INSA Toulouse

INSA (Institut National des Sciences Appliquées) Toulouse was established in 1963. It is depending upon the French Ministry of Higher Education, and is one of five INSA schools in France. The other ones are located in Lyon, Rennes, Strasbourg, and Rouen. The two main activities of INSA are to educate engineers and to develop and conduct research activities. INSA Toulouse had 2 417 students in 2004/2005 (of which 2 018 were engineering students). Since its establishment, around 9 179 engineers have graduated from INSA. There are eight departments at INSA Toulouse, and specialisations available at undergraduate level (Bachelor's) include the following subjects:

- Construction engineering
- Materials devices and systems engineering
- Modelling, informatics and communications
- Chemical, biochemical and environmental engineering

From the academic year 2003-2004, INSA offers a Master's research degree and a PhD following the current implementation of the 3-2-3 cursus that French higher education does to harmonise to the EU higher education system (the Bologna process). They now offer Master Degree courses in the following areas and subjects:

- Biochemical engineering
- Civil engineering
- Mathematics and modelling engineering
- Computer engineering
- Networks and Telecommunications
- Automatic Control - Electronics
- Mechanical engineering
- Industrial processes engineering
- Physics engineering

As mentioned earlier, the principle difference of the “INSA family” and the other engineering schools (Grandes Ecoles) in France is that the latter choose students from a series of very advanced entry examinations (“concours”) that the students prepare for at least two years after completing upper secondary school (baccalauréat), whereas INSA recruits students directly from upper secondary school. Selection criteria are grades during the last year and/or final baccalauréat results coupled with personal interviews of the applicants. The INSA thus proposes a five year cursus to become engineer, whereas the other “Grandes Ecoles” generally offer three year engineering programmes (after the two preparation years post-baccalauréat in upper secondary school).

4.1 NORGINSA

The Norwegian programme – NORGINSA – has been in place since 1990 and was the first study programme that was negotiated between France and Norway following the Troll agreement. The programme was designed and implemented by two persons – who became close friends – Rolf Tobiassen, former director of SUHF and Henri Barthet, former director for international relations at INSA. Both are retired now. When this study programme was developed, they placed great emphasis on two dimensions: the instruction and education, the social and cultural aspects of the stay of Norwegians at INSA. The programme was the first in French higher education to be organised like this, and according to Tobiassen, it was a model for others at a time where French higher education was rather closed and inward looking. For Josette Mischler, former pedagogical responsible at INSA (retired in 2002), the relationship between Tobiassen and Barthet was the key to this success, and “they broke barriers” with this Norwegian study programme.

Originally, the Norwegian students had two special years, and integrated French classes fully first during the third year. Since the new study programme came in 2002, the Norwegians have one special year and enter the regular classes for “pre-specialisation” already the second year. They still have special support classes in mathematics and some of the other natural scientific subjects during second and third year, while following normal classes. The special support classes replaces the optional subjects of the second and third year. The present pedagogical responsible, Bernard Rousseau, said the most difficult year earlier was the third year, when the Norwegians integrated normal French classes. Now, consequently, it is a true barrier for the students to enter the second year. One would expect the integration to be much

more difficult as it comes one year earlier than before, but Rousseau does not see it this way: For him, the increased difficulty is counter-balanced by the fact that the new second year is more oriented towards applications – whereas it was purely theoretical before. Since Norwegians are fond of practical applications, they are very motivated to succeed, and with the help of a tutor system (each student has a tutor during second year, and some also have one during third year), it seems that the new study system suits the Norwegians very well.

INSA has made available documentation that, to a certain extent, keeps track of the Norwegian students that have been part of the programme. In order to study student throughput, we have designed table 4.1 below. At horizontal lines, each class can be followed over time, and because some students leave during the studies, while practically none arrive during the study course, the students who disappear are those who abandon INSA to pursue their studies elsewhere (for the most cases) or who find other things to do. There are clearly big class differences, some classes “survive” well, while others have many who leave before the end of the studies. The following table can be read the following way: at horizontal lines, each class can be followed over time. We see, for example, that there have been between 9 and 21 students admitted, but generally less students than that have started their studies. In 1990-91, 11 students were admitted, while only 9 started their studies in first year. However, only one student left after first year, and only one left after second year, and the remaining students pursued their studies at INSA and finished the fifth year.

In the table one can see – for each academic year – the number of Norwegians who were enrolled and who studied at each level of studies by following the shaded or white areas diagonally upwards towards the right. For the academic year 2003-04, for example, we find that 11 students were admitted at the programme, 6 completed the first year, 9 completed the second, 7 completed the third, 6 completed the fourth, and 6 completed the fifth year.

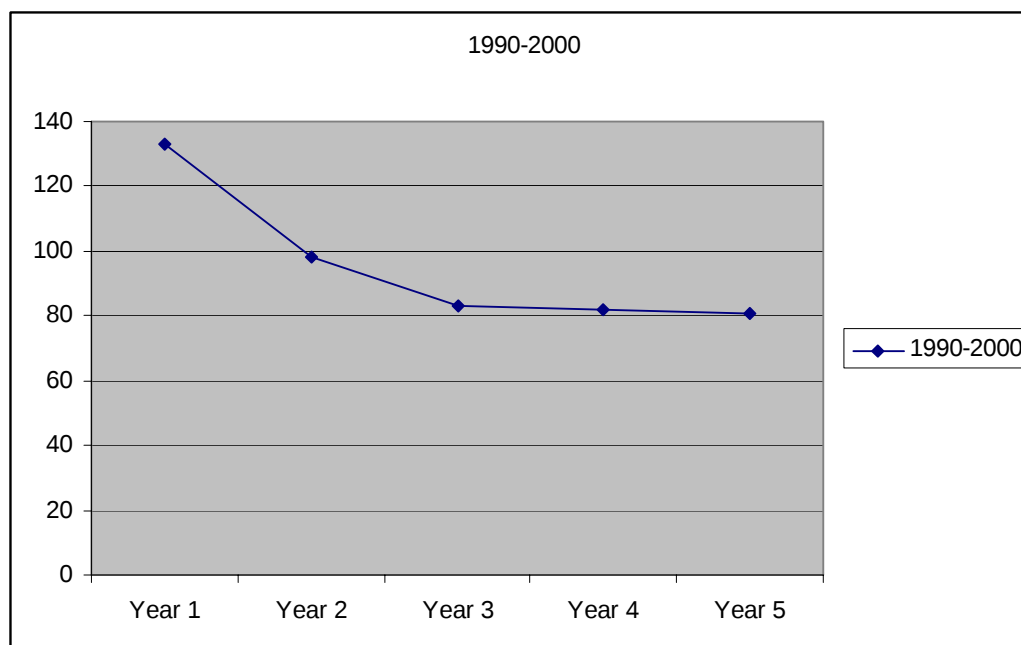
Table 4.1 Number of Norwegian students at different levels of studies at INSA Toulouse. 1990-1991 to 2005-06.

	Admission	1. year	2. year	3. year	4. year	5. year
1990-91	11	9	8	7	7	7
1991-92	18	16	13	9	9	9
1992-93	9	8	4	4	4	4
1993-94	10	9	8	6	6	6
1994-95	19	15	11	10	10	9
1995-96	15	12	10	9	9	9
1996-97	14	12	10	10	10	10
1997-98	17	15	14	13	13	13
1998-99	8	5	3	2	2	2
1999-00	21	15	7	6	6	6
2000-01	19	17	10	7	6	6
2001-02	14	14	9	7	7	
2002-03	13	10	9	6		
2003-04	9	6				
2004-05	11	11				
2005-06	11					

Source: Information provided by the administrative services at NORGINSA

We have made a graphical representation of the throughput for the academic years 1990-91 to 2000-01, i.e. for the classes which would have the time to finish their studies' fifth year before these data were collected. There are some special cases of students who have gone to other prestigious engineering schools and some who have taken other studies in France, and following the type of studies they have pursued, they are counted or not in the table and figure. Among those who have left INSA during the studies, a large majority have pursued their studies of engineering at NTNU.

Figure 4.1 Number of Norwegian students at the different levels (study years) at INSA Toulouse. 1990-2000.



As the previous table showed, around 30 students altogether of those who were accepted at INSA did not start their studies. In the figure we have only showed students who effectively did start their studies at INSA Toulouse. The pattern is quite clear, and follows our impression from the interviews with students and responsible staff at INSA. Many students struggle in the beginning – because they fail, because they were disappointed by the studies or French pedagogy, or for other reasons. But among those who make it to the third year, most complete their studies at INSA (eventually through an exchange between INSA and another higher education institution elsewhere organised by ERASMUS or the like) and receive their diplomas as engineers from INSA Toulouse.

Despite all the selection processes undergone by the students entering the programmes, they experienced the study programme to be extremely hard, particularly the first two years. This was partly due to the typical French way of educating first year students. The students reported that one must be motivated and able to work hard. Students reported that they got up at 06:45, started with classes at 08:00 - 12:00, then had lunch until 14:00 and continued with classes until 17:00. Lessons last for one hour and fifteen minutes, not 45 minutes as is normal in Norway. In the evening they had to do some homework and prepare for the next day. In addition, even the most gifted Norwegian students with excellent results from Norwegian secondary school felt silly in the beginning to be confronted with bad grades and/or failed exams. Having to adjust to the French mode of learning mathematics and natural sciences was

difficult for them. Particularly this goes for maths instruction that has a much more theoretical approach than in Norway. In France, students have to plod formulas. The French think it is rather funny to see the very advanced calculators of the Norwegians. Such machines are not useful at all in theoretical French mathematics (but they become useful during higher level of engineering studies in France as well).

The Norwegian second year students interviewed argued that the friendship between them is important to adjust to the French mode of teaching in the natural sciences. Such psychological support is really needed. However, integration into the community of French students is necessary in order to gain better knowledge of the French language and culture. Entering ordinary French classes made integration easier. Despite the fact that the French students were younger and frequently visited their hometowns during the week-ends, the Norwegian students did make French school mates. The multiple leisure activities offered on campus, such as music, theatre, sailing, and skiing were also important arenas for socialising with the French.

5 The university and studies at UT1 Sciences Sociales

UT1 is an old university that was originally founded in 1229. It was profoundly reformed in 1968, a year of riots and much change in French higher education. The university is located in the middle of the city centre of Toulouse. It houses a faculty of economics, a faculty of law, and a faculty of administration and communication. It also has a centre of informatics and a centre of technology. Studies can be pursued within the following areas:

- Economic and social administration
- Law
- Management
- Political science
- Modelling and information system sciences
- Economic sciences
- Human and social sciences

It is an aim for the university, and a general attitude, to allow students to move rather freely between the different lines of study so that students can choose other routes than the “standard” ones. The university currently has more than 17000 students. It is a typically French university in the sense that it is very open – every French student holding a baccalauréat can enter any of the studies, but in order to progress in the second and the following years of the studies is restricted by examinations after each semester. Only students with grades judged sufficient are allowed to progress. Values of academic freedom are important, though, and examination after the first year can be repeated as many times as the candidates wish. There is in principle no mandatory presence at classes and in exercise sessions during the semesters.

The faculty for economics (Faculté des sciences économiques) has 2.900 students all together, and around 35 percent are foreigners. The faculty enjoys a high international reputation for the quality of the research conducted there. It was ranked very highly by quality of research by the European Economic Association in 2002, and it is believed among staff and students that the excellence from research leads to high quality in education, especially at the postgraduate and master levels. The standard options offered to Norwegians are within the Bachelor in Economics and Management (Licence Economie et Gestion). This option leads to

several Masters (of economic statistics, econometrics, economics, management, economic engineering). Transfer to political science (at the Institut d'Etudes Politiques) is also relatively straightforward and common.

The Norwegian programme – Action Norvège – started in 1992. It is anchored in the Faculty for economics, and its primary aim was to educate Norwegian students at the level of “maîtrise” following the old education system. This was four years of normalised progression and gave the Norwegian students the right to use the degree “siviløkonom”. Due to the preparatory year that Norwegians at “Action Norvège” normally have to follow, this gave the Norwegians a normal duration of five years of studies. In 2003, the university was chosen to participate in the first (of three) waves of reform, whereby a new degree system based on the Bachelor-Master model was implemented. Since then, the degree structure became standardised to three years of Bachelor and two years of Master, and for Norwegian students this prolonged their studies to 6 years including the preparatory year.

5.1 Action Norvège – the programme and students

Thanks to information made available to NIFU STEP from the administration of the Faculty of economics, we have been able to make a table of the number of Norwegian studies who were registered at different study years of this faculty. It is possible to discard Norwegians participating at shorter university exchange programmes (like ERASMUS), but not to distinguish between Norwegians who have been at Action Norvège and Norwegians who have studied at the faculty by other arrangements.

The table shows these figures. At horizontal lines, each class can be followed over time. We see that there have been between 10 and 22 students in the preparation year. The class starting in the academic year 1992-93 had 14 students for the preparation year, then there were 12 students both the first and second years of studies, and then respectively 10 and 9 the two last years (to the equivalent of “siviløkonom”).

In the table one can see – for each academic year – the number of Norwegians who were enrolled and who studied at each level of studies by following the shaded or white areas diagonally upwards towards the right. For the academic year 2003-04, for example, we find that 16 students were admitted at the preparatory year, 8 completed the first year, 10 completed the second, 24 completed the third, 12 completed the fourth, and 7 completed the fifth year. The amount of students one year at different levels can thus be followed diagonally from the (t) cell and up diagonally towards the right.

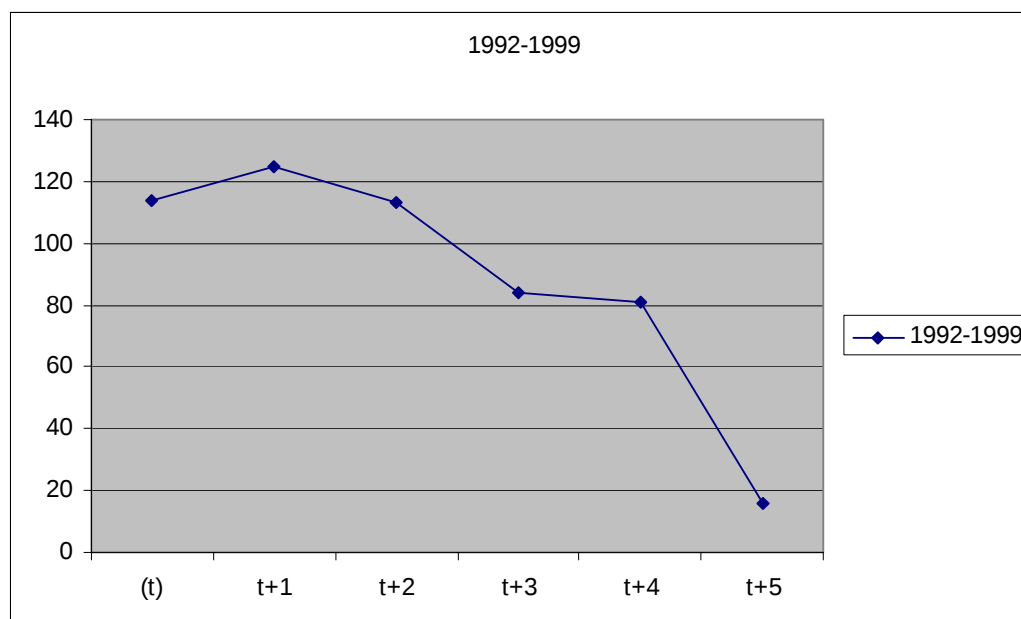
Figure 5.1 Number of Norwegian students registered at different levels of studies at Faculty for economics at UT1

	(t)	t+1	t+2	t+3	t+4	t+5
1992-93	14	12	12	10	9	0
1993-94	16	13	13	8	9	1
1994-95	13	11	11	11	14	2
1995-96	10	11	9	1	4	0
1996-97	12	12	8	6	3	0
1997-98	15	18	14	12	11	5
1998-99	16	24	27	20	19	7
1999-00	18	24	19	16	12	1
2000-01	22	25	30	24	18	
2001-02	11	10	10	7		
2002-03	15	8	9			
2003-04	16	9				
2004-05	12					
2005-06	10					

Source: information provided by the administrative services at UT1

In order not to lose students who have chosen other study routes than the ones foreseen by Action Norvège, we have counted all the students who were registered by the administrative services at UT1, no matter what area they were registered in, and there were from year to year quite many Norwegians in political science, in economic engineering, and in management science, to mention only the most important ones. Because it has not been able to look only at the Norwegians at Action Norvège, we see that many classes actually increase over time (that was the case notably from 1997-2000), and the profiles do therefore not represent the true picture of how many Norwegians who leave the programme every year. A graphical representation of the years 1992-1999 (the last available where students with normal study progression would have accomplished 6 years of study) is given in the figure below.

Figure 5.2 Number of registered Norwegian students at the different levels (study years) at UT1. 1992 – 1999.



As mentioned before, the studies are open at UT1, and there are many students for the first and second year of study. This is according to the ordinary university system in France.

According to the administration at the Faculty of economics, there is considerable failure among the regular students during the first two years at Economics and Management. First year, less than half of the registered students pass to enter second year, and at second year, around 60 percent of the students pass to third year. For Norwegian students, the success rate is much higher. In Table 5.1 we show success rates of Norwegians at UT1. They are generally very successful, and although the numbers to transform into shares are low, it is clear from the table that success rates are high among Norwegians studying economics and management at UT1.

Table 5.1 Success rates for classes of Norwegian students at the field Economics and Management, Faculty of economics, UT1. 2000-2005.

	Year 1 (L1)	Year 2 (L2)	Year 3 (L3)	Year 4 M1)
2000-02	65 %	90 %	89 %	100 %
2001-02	88 %	86 %	84 %	100 %
2002-03	79 %	86 %	69 %	94 %
2003-04	100 %	100 %	89 %	88 %
2004-05	78 %	81 %	83 %	92 %

Source: Administrative services UT1

A first “preparatory year”, mainly consisting of instruction in French language and culture, was tailored for the needs deemed necessary for the Norwegian freshmen. This type of pre-qualification is considered more important for students in economy than in maths and physics

where the expression of oral and written French is less important. The first year instruction is also given in mathematics and econometrics follow instruction and exercises in national and business accounting together with the French students. They also have law, statistics, and accounting, all subjects which Norwegians would otherwise find difficult when entering the first year of studies.

The students at UT1 have to go through rather tough entry requirements: An entry exam in mathematics, a test in logics, and a letter of motivation or oral interview in French in order to test the motivations of the students. For instance, a group of students interviewed experienced that one year most of them failed the math test. And this despite the fact that most of the Norwegian students were well prepared in maths (had 3MX from Norwegian secondary school). However, this does not happen every year and fortunately there is no formal requirement that this entry exam had to be passed.

The students had experienced that it was important to establish a good contact with the study counsellors, the French professors as well as first year students.

The students miss a tutor system (older students helping new students to get around) like the ones practiced at most HE institutions in Norway today.

The students were aware that there are many top-class researchers at UT1 and they were very satisfied with the quality of the professors. When they first came to Toulouse, they didn't think they would stay for 6 years, but now they don't see why they shouldn't. The master studies have excellent reputation and that attracts.

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Appendix 1: Questionnaire

Appendix 2 Tables

Table A1 *To what extent your study sojourn in Toulouse has led to advantages at the labour market and personally, compared to what you think you would realise through comparable studies in Norway? (N=180)*

			To large extent	To average extent	To little extent	To no extent	Total
More respect from employer	INSA	N	25	38	22	17	102
		%	24,5	37,3	21,6	16,7	100,0
	UT1	N	17	37	16	8	78
		%	21,8	47,4	20,5	10,3	100,0
	Total	N	42	75	38	25	180
		%	23,3	41,7	21,1	13,9	100,0
More respect from colleagues	INSA	N	19	44	23	16	102
		%	18,6	43,1	22,5	15,7	100,0
	UT1	N	18	35	17	8	78
		%	23,1	44,9	21,8	10,3	100,0
	Total	N	37	79	40	24	180
		%	20,6	43,9	22,2	13,3	100,0
Better analytical skills	INSA	N	25	40	25	12	102
		%	24,5	39,2	24,5	11,8	100,0
	UT1	N	23	30	18	7	78
		%	29,5	38,5	23,1	9,0	100,0
	Total	N	48	70	43	19	180
		%	26,7	38,9	23,9	10,6	100,0
Ability to absorb new knowledge quickly	INSA	N	41	37	18	6	102
		%	40,2	36,3	17,6	5,9	100,0
	UT1	N	32	26	15	5	78
		%	41,0	33,3	19,2	6,4	100,0
	Total	N	73	63	33	11	180
		%	40,6	35,0	18,3	6,1	100,0
Ability to work under pressure	INSA	N	55	33	10	4	102
		%	53,9	32,4	9,8	3,9	100,0
	UT1	N	31	25	15	7	78
		%	39,7	21,1	19,2	9,0	100,0
	Total	N	86	58	25	11	180
		%	47,8	32,2	13,9	6,1	100,0
Ability to use time efficiently	INSA	N	23	39	27	13	102
		%	22,5	38,2	26,5	12,7	100,0
	UT1	N	17	29	23	9	78
		%	21,8	37,2	29,5	11,5	100,0
	Total	N	40	68	50	22	180
		%	22,2	37,8	27,8	12,2	100,0
More knowledge and theoretical skills	INSA	N	30	39	24	9	102
		%	34,0	38,2	23,5	8,8	100,0
	UT1	N	14	31	24	9	78
		%	17,9	39,7	30,8	11,5	100,0
	Total	N	44	70	48	18	180
		%	24,4	38,9	26,7	10,0	100,0
Greater ability to transforming theory to practise	INSA	N	7	24	45	26	102
		%	6,9	23,5	44,1	25,5	100,0
	UT1	N	4	15	42	17	78
		%	5,1	19,2	53,8	21,8	100,0
	Total	N	11	39	87	43	180
		%	6,1	21,7	48,3	23,9	100,0
Ability to aquire new knowledge	INSA	N	31	38	24	9	102
		%	30,4	37,3	23,5	8,8	100,0
	UT1	N	19	31	21	7	78
		%	24,4	39,7	26,9	9,0	100,0
	Total	N	50	69	45	16	180
		%	27,8	38,3	25,0	8,9	100,0

			To large extent	To average extent	To little extent	To no extent	Total
Ability to plan, organise and coordinate activities	INSA	N	7	32	35	28	102
		%	6,9	31,4	34,3	27,5	100,0
	UT1	N	13	26	26	13	78
		%	16,7	33,3	33,3	16,7	100,0
	Total	N	20	58	61	41	180
		%	11,1	32,2	33,9	22,8	100,0
Ability to work productively in teams	INSA	N	5	23	32	42	102
		%	4,9	22,5	31,4	41,2	100,0
	UT1	N	6	14	36	22	78
		%	7,7	17,9	46,2	28,2	100,0
	Total	N	11	37	68	64	180
		%	6,1	20,6	37,8	35,6	100,0
Ability to mobilise others' resources	INSA	N	6	17	35	44	102
		%	5,9	16,7	34,3	43,1	100,0
	UT1	N	5	18	33	22	78
		%	6,4	23,1	42,3	28,2	100,0
	Total	N	11	35	68	66	180
		%	6,1	19,4	37,8	36,7	100,0
Ability to use ICT	INSA	N	5	26	28	43	102
		%	4,9	25,5	27,5	42,2	100,0
	UT1	N	2	15	30	31	78
		%	2,6	19,2	38,5	39,7	100,0
	Total	N	7	41	58	74	180
		%	3,9	22,8	32,2	41,1	100,0
Ability to provide new ideas and solutions	INSA	N	11	29	35	27	102
		%	10,8	28,4	34,3	36,5	100,0
	UT1	N	9	19	32	18	78
		%	11,5	24,4	41,0	23,1	100,0
	Total	N	20	48	67	45	180
		%	11,1	26,7	37,2	25,0	100,0
Critical sens to own and others' ideas	INSA	N	10	18	34	30	102
		%	9,8	27,5	33,3	29,4	100,0
	UT1	N	8	31	24	15	78
		%	10,3	39,7	30,8	19,2	100,0
	Total	N	18	59	58	45	180
		%	10,0	32,8	32,2	25,0	100,0
Ability to oral communication to an audience	INSA	N	14	21	31	36	102
		%	13,7	20,6	30,4	35,3	100,0
	UT1	N	7	15	32	24	78
		%	9,0	19,2	41,0	30,8	100,0
	Total	N	21	36	63	60	180
		%	11,7	20,0	35,0	33,3	100,0
Ability to written communication through memos, reports and other documents	INSA	N	20	29	29	24	102
		%	19,6	28,4	28,4	23,5	100,0
	UT1	N	18	18	27	15	78
		%	23,1	23,1	34,6	19,2	100,0
	Total	N	38	47	56	39	180
		%	21,1	26,1	31,1	21,7	100,0
Knowledge to French language	INSA	N	90	9	1	2	102
		%	88,2	8,8	1,0	2,0	100,0
	UT1	N	67	7	3	1	78
		%	85,9	9,0	3,8	1,3	100,0
	Total	N	157	16	4	3	180
		%	87,2	8,9	2,2	1,7	100,0
Knowledge to French culture	INSA	N	88	10	2	2	102
		%	86,3	9,8	2,0	2,0	100,0
	UT1	N	66	8	3	1	78
		%	84,6	10,3	3,8	1,3	100,0
	Total	N	154	18	5	3	180
		%	85,6	10,0	2,8	1,7	100,0

			To large extent	To average extent	To little extent	To no extent	Total
Increases possibilities to achieve an international career	INSA	N	59	31	10	2	102
		%	57,8	30,4	9,8	2,0	100,0
	UT1	N	47	23	6	2	78
		%	60,3	29,5	7,7	2,6	100,0
	Total	N	106	54	16	4	180
		%	58,9	30,0	8,9	2,2	100,0
A valuable network among Norwegian fellow students	INSA	N	28	28	31	15	102
		%	27,5	27,5	30,4	14,7	100,0
	UT1	N	20	26	22	10	78
		%	25,6	33,3	28,2	12,8	100,0
	Total	N	48	54	53	26	180
		%	26,7	30,0	29,4	13,9	100,0
A valuable network among other fellow students	INSA	N	19	23	42	18	102
		%	18,6	22,5	41,2	17,6	100,0
	UT1	N	13	14	32	19	78
		%	16,7	17,9	41,0	24,4	100,0
	Total	N	32	37	74	37	180
		%	17,8	20,6	41,1	20,6	100,0
Enforcement of the personality	INSA	N	53	39	6	4	102
		%	52,0	38,2	5,9	3,9	100,0
	UT1	N	48	25	3	2	78
		%	61,5	32,1	3,8	2,6	100,0
	Total	N	101	64	9	6	180
		%	56,1	35,6	5,0	3,3	100,0
Improved perspective on Norway and Norwegian issues	INSA	N	59	34	7	2	102
		%	57,8	33,3	6,9	2,0	100,0
	UT1	N	52	17	8	1	78
		%	66,7	21,8	10,3	1,3	100,0
	Total	N	111	51	15	3	180
		%	61,7	28,3	8,3	1,7	100,0

Table A2 *To what extent your study sojourn in Toulouse has led to disadvantages at the labour market and personally, compared to what you think you would realise through comparable studies in Norway? (N=180)*

			To large extent	To average extent	To little extent	To no extent	Total
Employers in Norway do not valorise the programme in Toulouse	INSA	N	2	22	32	46	102
		%	2,0	21,6	31,4	45,1	100,0
	UT1	N	12	20	28	18	78
		%	15,4	25,6	35,9	23,1	100,0
	Total	N	14	42	60	64	180
		%	7,8	23,3	33,3	35,6	100,0
The content in the programme does not fit to Norwegian needs	INSA	N	0	10	35	57	102
		%	0,0	9,8	34,3	55,9	100,0
	UT1	N	6	23	35	14	78
		%	7,7	29,5	44,9	17,9	100,0
	Total	N	6	33	70	71	180
		%	3,3	18,3	38,9	39,3	100,0
Exclusion from important networks	INSA	N	9	28	35	30	102
		%	8,8	27,5	34,3	29,4	100,0
	UT1	N	26	26	14	12	78
		%	33,3	33,3	17,9	15,4	100,0
	Total	N	35	54	49	42	180
		%	19,4	30,0	27,2	23,3	100,0
Difficulties getting a job	INSA	N	0	9	29	64	102
		%	0,0	8,8	28,4	62,7	100,0
	UT1	N	4	21	32	21	78
		%	5,1	26,9	41,0	26,9	100,0
	Total	N	4	30	61	85	180
		%	2,2	16,7	33,9	47,2	100,0
Lacking knowledge of Norwegian employers and work on the Norwegian labour market	INSA	N	6	34	33	29	102
		%	5,9	33,3	32,4	28,4	100,0
	UT1	N	18	32	20	8	78
		%	23,1	41,0	25,6	10,3	100,0
	Total	N	24	66	53	37	180
		%	13,3	36,7	29,4	20,6	100,0
Modest possibilities in Norway to exploit language and culture skills	INSA	N	14	37	31	20	102
		%	13,7	36,3	30,4	19,6	100,0
	UT1	N	21	34	16	7	78
		%	26,9	43,6	20,5	9,0	100,0
	Total	N	35	71	47	27	180
		%	19,4	39,4	26,1	15,0	100,0
Weaker English skills	INSA	N	2	12	25	63	102
		%	2,0	11,8	24,5	61,8	100,0
	UT1	N	7	15	25	31	78
		%	9,0	19,2	32,1	39,7	100,0
	Total	N	9	27	50	94	180
		%	5,0	15,0	27,8	52,2	100,0
Larger distance from Norwegian news and issues in Norway	INSA	N	3	25	34	40	102
		%	2,9	24,5	33,3	39,2	100,0
	UT1	N	10	31	21	16	78
		%	12,8	39,7	26,9	20,5	100,0
	Total	N	13	56	55	56	180
		%	7,2	31,1	30,6	31,1	100,0
Less contact with family and friends in Norway	INSA	N	13	31	33	25	102
		%	12,7	30,4	32,4	24,5	100,0
	UT1	N	13	25	26	14	78
		%	16,7	32,1	33,3	17,9	100,0
	Total	N	26	56	59	39	180
		%	14,4	31,1	32,8	21,7	100,0
More study loans	INSA	N	5	12	32	53	102
		%	4,9	11,8	31,4	52,0	100,0
	UT1	N	8	13	25	32	78
		%	10,3	16,7	32,1	41,0	100,0
	Total	N	13	25	57	85	180
		%	7,2	13,9	31,7	47,2	100,0
Prolonged studies	INSA	N	3	11	21	67	102
		%	2,9	10,8	20,6	65,7	100,0
	UT1	N	9	11	28	30	78
		%	11,5	14,1	35,9	38,5	100,0
	Total	N	12	22	49	97	180
		%	6,7	12,2	27,2	53,9	100,0