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Gearing Up for Europe via Student Mobility and the Internationalization of Study

Abridged Version

Findings of an Investigation on Foreign Mobility by German Students and the Internationalization of Study at German Institutions of Higher Education



This study was conducted by the Higher Education Information System (HIS), Hannover, on behalf of the Federal Ministry of Education, Science, Research and Technology. Responsibility for its contents is assumed by HIS.

Internet Version of the Report

An HTML version of this report is available on the World Wide Web at the following site:

<http://www.his.de/abt3/proj/684/>

Work on a WWW version of the full body text is currently in progress.

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Gearing Up for Europe via Student Mobility and the Internationalization of Study

- Abridged Version -

Peter Müßig-Trapp / Klaus Schnitzer

Summary

This publication is the abridged version of a report entitled "Gearing Up for Europe via Mobility and the Internationalization of Study" which presents the findings of a study conducted by the Higher Education Information System (HIS) on behalf of the Federal Ministry of Education, Science, Research and Technology (BMBF). The full-length version of the report may be obtained from the BMBF's Public Relations Division.

Under the term *mobility*, the report addresses foreign study as the traditional approach to internationalization. Under the caption *internationalization of curricula*, innovative ways of achieving a more "virtual" mobility are put up for discussion.

Detailed attention is given to the prerequisites for, and barriers to, study-related sojourns abroad, as well as to possible ways of overcoming obstacles. Deficient foreign language ability represents one of the greatest barriers. Another major impact is made by the personality make-up of students. For example, introverted students – such as are disproportionately prevalent in engineering fields – show a preference for group programmes.

A very high level of acceptance is shown towards internationalized curricula enabling "stay-at-home" students to add a European or global dimension to their studies. Three quarters of those surveyed are entirely sure they would have participated in at least one of the models up for selection. Initiatives seeking to promote internationalized curricula among students are thus analogous to banging on open doors.

The study is based on data collected by means of a dedicated written survey of students, together with selected findings from the 14th Social Survey by the Deutsches Studentenwerk (National German Association for Student Affairs) and an evaluation of job advertisements.

1 About the Report

The study "Gearing Up for Europe via Student Mobility and the Internationalization of Study" was conducted by the Higher Education Information System (HIS) in September of 1995 on behalf of the Federal Ministry of Education, Science, Research and Technology (BMBF). The study is based on a primary survey and secondary statistical evaluation.

This report constitutes a summary of the full-length version being published simultaneously by the Federal Ministry of Education, Science, Research and Technology (BMBF).

The summary includes specific recommendations ensuing from analysis of individual issues. In the full-length version, these recommendations are only inferred as value judgements and deductions. Recommendations are italicized.

2 Object of Inquiry

The Internationalization of German Higher Education

In the document “Cornerstones of Higher Education Policy” (BMBF, 05.12.1996, p. 3), the internationalization of German higher education (point 18) is emphasized as one important area in need of reform. A wider “opening” of German higher education is intended not only to make enrollment more attractive for foreign students, but also to internationalize the educational experience for German students. While clear objectives pertaining to study by foreign students already exist¹⁾, concepts for intensifying the international experience for German students are still being deliberated.

Actual and Virtual Mobility as Instruments of Internationalization

In light of this, the Federal Ministry of Education, Science, Research and Technology charged HIS with the current study: “Gearing Up for Europe via Student Mobility and the Internationalization of Study”.

- Under the term “mobility,” study abroad is explored as the conventional approach to internationalization.
- Under the term “curricular internationalization,” innovative ways of achieving a more virtual kind of mobility are submitted for discussion.

The realization that cross-border mobility, alone, is not enough and that study within German borders must also gain an international character was reached as early as 1992 by the Council of Science in its “Recommendations on Internationalizing Academic Relations”. These recommendations by the Council of Science pointed to foreign study and the internationalization of curricula as two instruments of internationalization in need of further development.

The New Task of Promoting the “European Dimension”

Responding to the “Memorandum on Higher Education in the European Community” (17.11.1992), the federal government resolved to “put Europe into the curricula”, opting for an innovative broadening of the traditional approach to international mobility. In so doing, the government presumed a complementary interrelationship between actual and virtual mobility. This conviction was reinforced by efforts on the part of the OECD, which in 1993 issued proposals on “The Development of Internationalized Curricula” based on country studies (OECD-CERI Guidelines, 1994, p. 7).

The study then gained particular topicality and a pertinence for action in light of the European Commission’s new SOKRATES programme (March, 1995). While the major emphasis of ERASMUS Phases I and II was on promoting cross-border mobility among students, Chapter 1 of SOKRATES (new ERASMUS programme) provides a framework for adding a “**European dimension**” to the entire curricular spectrum at universities. In the SOKRATES handbook (Sept., 1995, p. 17) we find the remark:

“Although student mobility is still of central importance to the programme, a greater amount of attention is now being given to achieving a balance of fields of study and regions, and participating universities are increasingly being offered incentives to add a European perspective to courses taken by students who are not directly participating in the mobility programme.”

Thanks to this supplementary promotion of curricular internationalization, the nine tenths of the student body not (or not yet) participating in foreign study can now enjoy the benefits of internationalization efforts.

¹⁾ See the joint declaration of the Federal Minister of the Foreign Office and the Federal Minister of Education, Science, Research and Technology from May of 1996: “Making Germany More Attractive as a Place of Study”.

Acceptance Study

Promoting this complement to study abroad involves the breaking of new conceptual ground, though. The present investigation seeks to provide a closer look at the reciprocal relationship between actual and virtual mobility as the two approaches to internationalization. One concern voiced in conjunction with promoting curricular internationalization was that it might become a “cost-cutting substitute” for actual mobility. Critical examination was necessary of the claim by programme officials that the relationship between the two approaches - actual mobility and curricular internationalization - is more likely to be mutually beneficial. In investigating this supposition, the primary focus ought to be on the perceptions of those actually affected, i.e. the students, themselves. Previous studies on curricular internationalization, e.g. the OECD country studies, pertained only to the interests of educational providers (HIS, 1996). In view of the wave of newly emerging international choices, it appeared auspicious to place greater emphasis on the user aspect. In analyzing the acceptance issue, particular attention is devoted to the differing needs of students so as to arrive at curricular options reflecting what students of the various disciplines actually need.

Requisite Conditions for Internationalization

Treatment of the two major topics - actual and virtual mobility - is reinforced by two essay-like analyses of the critical prerequisites for international mobility:

- foreign language skills and their use;
- international skills and their job-market relevance.

These prerequisites are too often taken for granted. However, as the study points out, the current state and future potential of these prerequisites have been overestimated. By way of example, the goals of multilingualism and the routine usage of the most common *lingua francae* in daily academic life are far from being achieved. There are also some shortcomings with regard to job-market relevance: On the one hand, students underestimate the needs of the job market, and on the other hand, hiring in certain employment sectors is still characterized by great restraint.

In anticipation of the challenges to be faced in the coming Europeanized and globalized economic community the study indicates possible ways of appropriately adapting the curricular offerings at German institutions of higher education, as well as pointing out the hindrances and obstacles which need to be overcome. These are not only caused by institutional structures within higher education, but also by the surrounding climate created by educational and employment policy.

3 Framework of the Study

The study is based on three principle sources of data:

The Survey “The Internationalization of Study”

The heart of the investigation is a 1996 survey of students entitled *The Internationalization of Study*. This survey is a problem-oriented, in-depth investigation of international mobility and internationalized curricula. Its scope is limited to students of the natural sciences, social sciences, psychology and education, because:

- the need for action is especially great in these fields;
- the typical traits of non-mobile students of narrow international perspective are the most prevalent in these fields.

Beyond this, students of business economics were surveyed as a comparison group (this group’s foreign mobility having been average in the past).

A total of 3,240 questionnaires could be included in the study. The net response rate was 41.1%. The chosen study disciplines cannot be representative of the average German student, therefore conclusions about *all* German students are not possible on the basis of this study. The conclusions drawn with respect to the targeted fields of study are, however, largely representative.

The 14th Social Survey

All questions calling for area-wide representativeness were resolved on the basis of data from the *14th Social Survey*. In the context of this survey, 27,500 German students were polled in the spring of 1994 about their periods of foreign residence for study purposes, among other things. The resulting pool of data lends itself to conclusions about German students as a whole. The Social Survey is representative at a nationwide level, as well as for the sub-regions “old Länder” and “new Länder”, by the structural traits of “gender”, “field of study”, “type of degree” and “type of institution”.

Analysis of Job Advertisements

Further data was generated by analyzing a total of 1,360 job advertisements appearing in the newspapers “Frankfurter Allgemeine Zeitung,” “Frankfurter Rundschau,” “Die Zeit” and “Süddeutsche Zeitung”. The analysis of this material provides information on the job-market relevance of “international” capabilities.

4 Trends in Internationalized Study

Goal of “10% Foreign Study Rate” to Be Reached in 1997

Since World War II, foreign mobility by German students is described by a curvilinear path with an upwards trend. Following a low in the Fifties, the rate of foreign mobility rose steadily through the mid Sixties, reaching its highest level to date in 1963, at 5.7%.

The Seventies were characterized by a widening of access to higher education which not only caused a doubling of enrollment, but also extended entry to educationally more “remote” strata of the population. It is likely that this change in the make-up of the student body accounts for the slumping foreign mobility rates in the Seventies. At the time, an international outlook was not yet as commonplace for students from educationally remote backgrounds as for students from educated backgrounds, and the rate of foreign study fell to its lowest ever at 3%.

The Eighties were marked by various efforts at promoting foreign study via higher education policy changes. The sixth revision of the Federal Educational Assistance Act (BAföG) removed some major impediments to study abroad. In the course of the European integration process, several European programmes for mobility, such as ERASMUS, began to take effect. By 1994, the foreign study rate had again risen to 5.4%. The current rate is about 6% – the highest since 1955.

Since the rate of 6% applies to a cross-section of the student body, roughly corresponding to 10% when extrapolated to include upper-semester students and graduates, it is probable that the 10% target for European participation in foreign study by all students at some stage of their student careers has meanwhile been reached.

Scientific/Technical Disciplines Catching Up

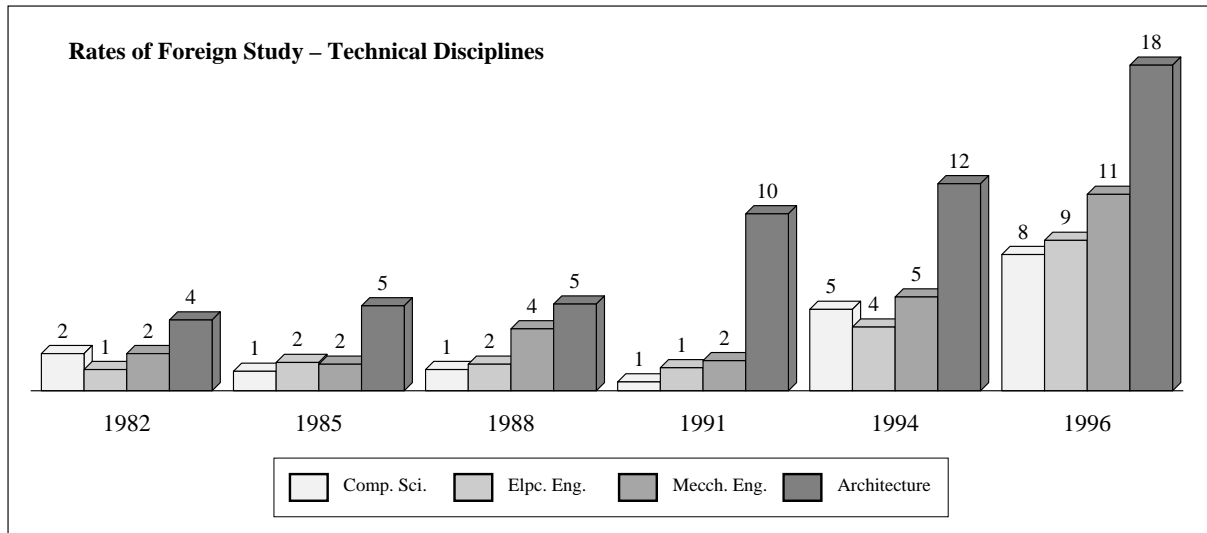
The rise in foreign study rates is also observable within specific fields of study. Although historical differences still exist in the frequency of participation in foreign study by students of scientific and technical disciplines, on the one hand, and students of the humanities and social sciences on the other hand, the rates for all disciplines traditionally ranging below the mean have been subject to disproportionately steep rises (see Fig. 1 and Fig. 2). As a case in point, the rate of foreign study for mechanical engineering underwent a fivefold increase in the period from 1982 to 1996.

German Mobility Rates Keeping Pace with International Rates

The positive trend in foreign mobility by German students in the past two decades means that German students are keeping up with their counterparts in Europe and elsewhere. Judging from the so-called “absentee rates” in UNESCO statistics, only very few countries show a higher frequency of foreign study than that of Germany (Austria, Portugal, Sweden, Denmark). In internationally very open neighboring countries such as France, the Netherlands and Great Britain, the rates of foreign study are considerably lower. The USA, while attractive to foreign students, is distinguished by a ten times lower rate of foreign mobility for its own students than that for Ger-

Fig. 1 Foreign Study Rates for Technical Disciplines

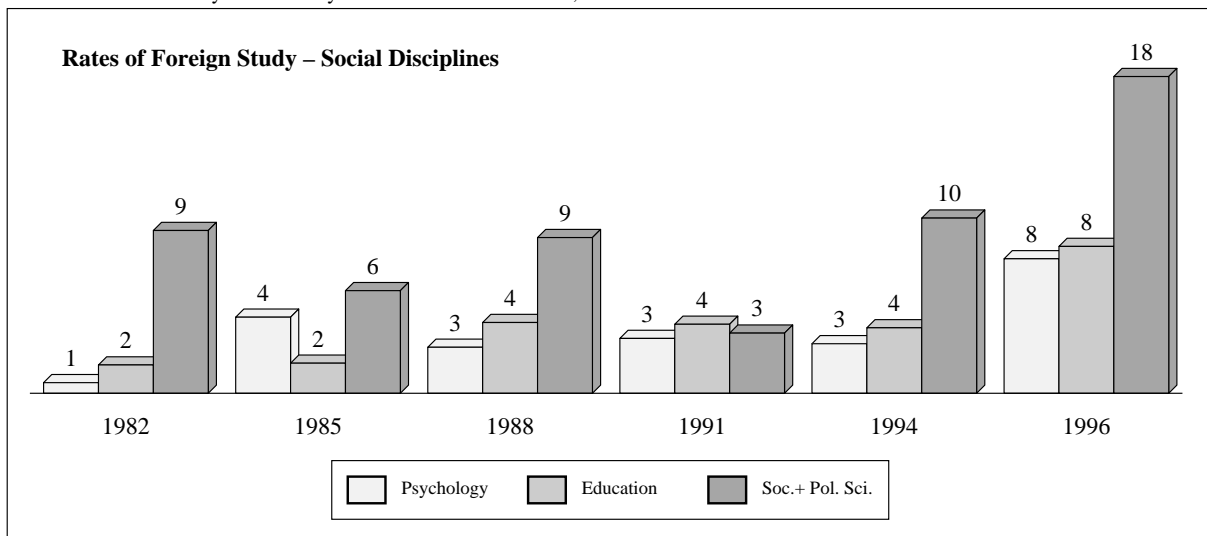
First-cycle university students as of 8th semester; in %



Internationalization of Study; additional sources (up to 1994): 10th - 14th Social Surveys

HIS
1996**Fig. 2 Foreign Study Rates for Social Disciplines**

First-cycle university students as of 8th semester; in %



Internationalization of Study; additional sources (up to 1994): 10th - 14th Social Surveys

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1996

many. Japan – which is faced with similar conditions to those in Germany with regard to internationality – sends about the same percentages of students abroad as Germany.

Contrary to the preconception of “foreign study burn-out” on the part of German students, they are found to have become comparatively much more receptive to foreign study thanks to various promotional efforts.

Recommendations

- Given a foreign study rate of 10%, the European target for foreign mobility by students will have been achieved. However, this level can only be kept stable over the long term if aid programmes proceed with unabated intensity. This also applies to the BAföG regulation concerning periods of

study/practical training abroad. At least in the interest of promoting foreign study, abolishing the two-semester exemption for study abroad (stipulation that this period is not to be counted against the maximum period of BAföG eligibility) appears to be contraindicated.

- *The broad promotion of foreign study practiced so far should be augmented by measures aimed at particular groups not yet engaging in foreign study as a matter of course. This applies both to students from educationally remote strata of the population as well as to students of certain scientific/technical subjects. A mobilization of future engineers and scientists would appear particularly advisable in light of the national economic picture. Beyond financial incentives, integrated exchange programmes for semester cohorts (group programmes) would appear especially expedient.*
- *In those fields of study with a more practical slant (engineering, business management), efforts should be stepped up to promote other forms of mobility besides conventional foreign study. Periods of practical training, internships and language courses are forms of mobility which are closely aligned with conventional study and tend to be more readily accepted than the plunge into foreign study.*



Building the Tower of Babel

“(1) And the whole earth was of one language, and of one speech. ... (4) And they said, Go to, let us build us a city and a tower, whose top may reach unto heaven... (5) And the LORD came down to see the city and the tower, which the children of men built. (6) And the LORD said, Behold, the people is one, and they have all one language; and this they begin to do: and now nothing will be restrained from them, which they have imagined to do. (7) Go to, let us go down, and there confound their language, that they may not understand one another's speech. (8) So the LORD scattered them abroad from thence upon the face of all the earth: and they left off to build the city. ...” (First Book of Moses, Genesis 11)

5 Knowledge of and Ability in Using Foreign Language

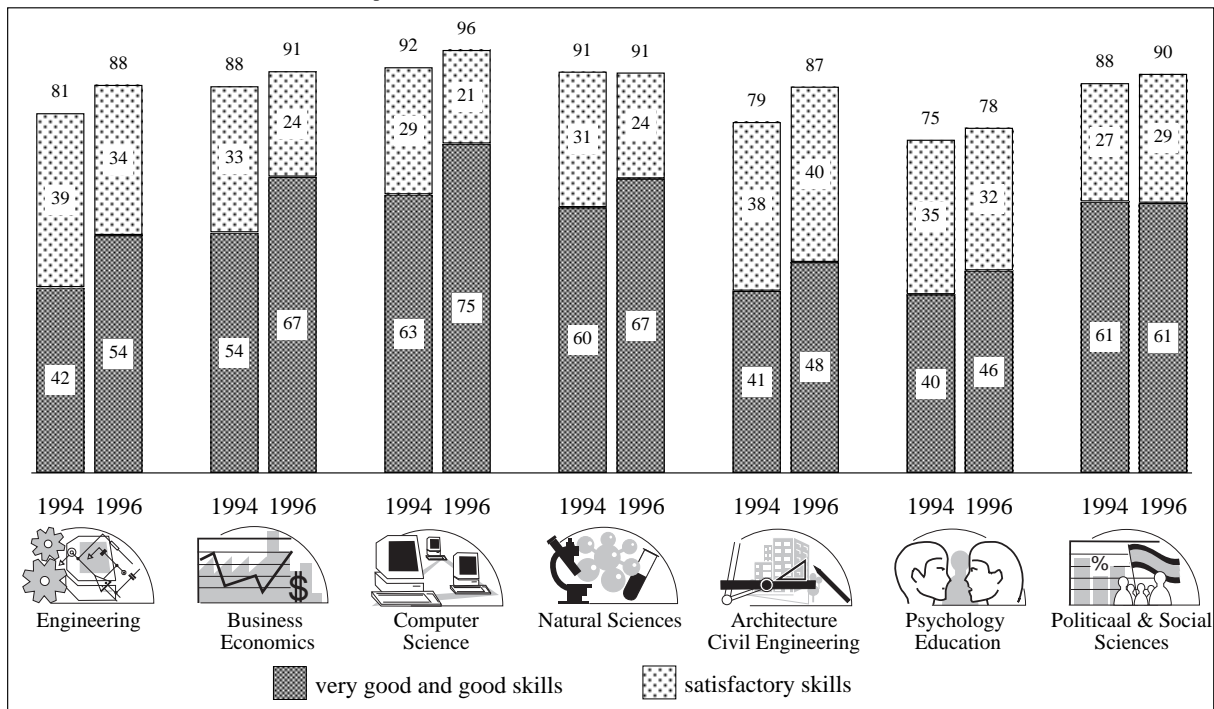
Foreign language skills are of central importance for extended foreign residencies, and especially for foreign study. In scientific discourse, knowledge of the English language is now indispensable in many fields. Business and industry also operate internationally and need graduates with a solid command of foreign language.

Only One out of Two Students Well Skilled in English

As may be expected, English is by far the most well-known foreign language. The English skills of 85% of all students range from “very good” to “satisfactory,” with only about half of those polled claiming to have “very good” to “good” skills. Proficiency in French is much less common, with only about 10% rating their French abilities as “good” or “very good”. Besides English and French, the only other languages of notable prevalence are Spanish and Russian. In each case, 2% of students claim to have at least “good” skills in these languages.

Fig. 3 English Skills over Time

Students of selected disciplines; as of 6th semester at FH / as of 8th semester at universities; in %



Internationalization of Study; additional source: 14th Social Survey

PTS
1996

Only 10% of Students Bilingual, only 1.5% Multilingual

The promotion of multilingualism is of prime importance within the European Community. As stated in the SOKRATES handbook (European Commission, 1995a, p. 27): "Better skills in an increasing number of Community languages are of fundamental significance for increased understanding and cooperation among nations." Consequently, financial support within the ERASMUS programme is awarded particularly for educational measures "catering to the least widespread and least often taught languages in the European Community" (European Commission, 1995a, p. 32). The Community holds that multilingual European citizens are a key factor in the creation of an open European territory.

The percentage of multilingual students, however, is discouragingly low. Just under half (43%) of all students cannot claim having good or very good skills in any foreign language. Another 46% have good or very good abilities in only one foreign language. Only a tenth feel they have good or very good abilities in two or more languages. In recapitulation: German students are still very far from the ideal of becoming multilingual European citizens. The question may be

raised as to whether the pursuit of this goal is perhaps unrealistic.

Improvement of Foreign Language Skills between 1994 and 1996

Foreign language skills are seen to have improved slightly in the period from 1994 to 1996 (Fig. 3). This trend is especially notable in engineering fields. While only 42% of students of electrical and mechanical engineering had good or very good knowledge of English in 1994, this figure had risen to as high as 54% by 1996. Similar increases occurred for students of business economics (54% in 1994; 67% in 1996). Skills in prominent languages besides English have also improved over the past two years (by an average of about three percentage points).

English Periodicals Consulted Most Often by Students of Natural Sciences and Computer Science

For consulting periodicals, English abilities are put to the greatest use by students of computer

science and the natural sciences, who read an average of more than 20 English articles per academic year. About half of the students read more than 10 articles a year in English (see Fig. 4). In the fields of engineering and business economics – fields for which the labour market demands a broad knowledge of English – foreign language is used to a much lesser degree. In the previous year, not even one article in English had been read by nearly 20% of engineering students and by 15% of business economics students (natural sciences/computer science: 7%). Only about a third had read more than 10 such articles. Apparently there is a much lesser need to consult English literature in these fields than in computer science and the natural sciences. Students of engineering and business economics will likely have to pay the price for this when seeking a job after graduation (see also analysis of job advertisements). The least use of English is made by students of psychology, education, social work and architecture: Less than a fifth of these students read more than 10 English articles within two semesters.

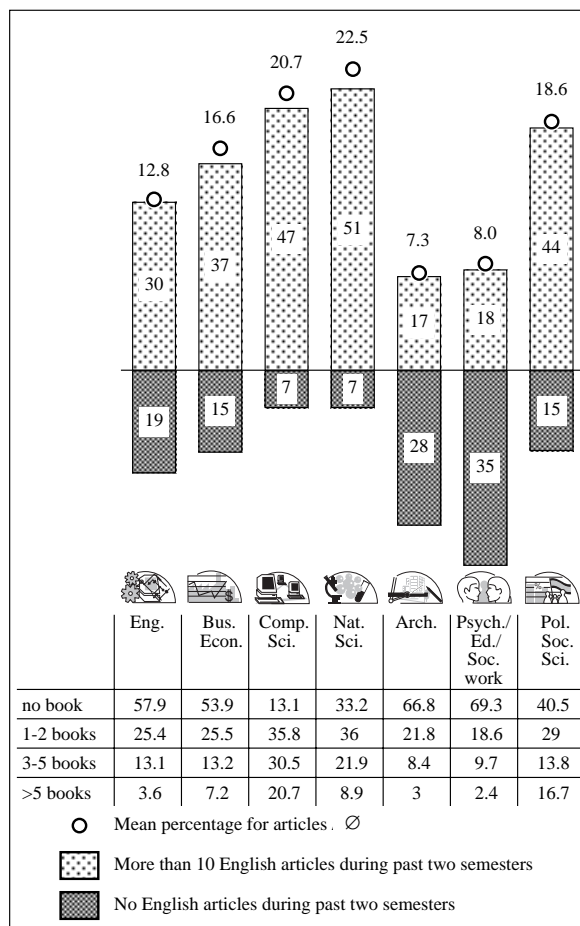
Time-Consuming Reading of English Texts

Just what do students mean when they claim having “good,” “satisfactory,” or “adequate” knowledge of English? The way in which students rate their reading speed for foreign-language texts can cast some light on this (see Fig. 5). Even students claiming a good command of English need to allow for additional time when reading English articles. On the average, students with good English skills take more than twice as long to read an article in English than in German. Students with satisfactory English skills take between 2.5 and far in excess of 3 times longer for the task. They thus have to count on taking an entire working day to read a piece of English literature which a native reader would manage in about 3 hours. Only with “good” or “very good” skills is the use of English possible with an acceptable expenditure of effort. Merely “satisfactory” skills do not suffice for this purpose.

Underdeveloped Verbal Skills and Negotiating Abilities

While studying, foreign language is mainly used for the reading of specialized periodicals, but a change often occurs upon entering a job. Work

Fig. 4 Reading of Specialist Books and Periodicals in English
in %



Internationalization of Study

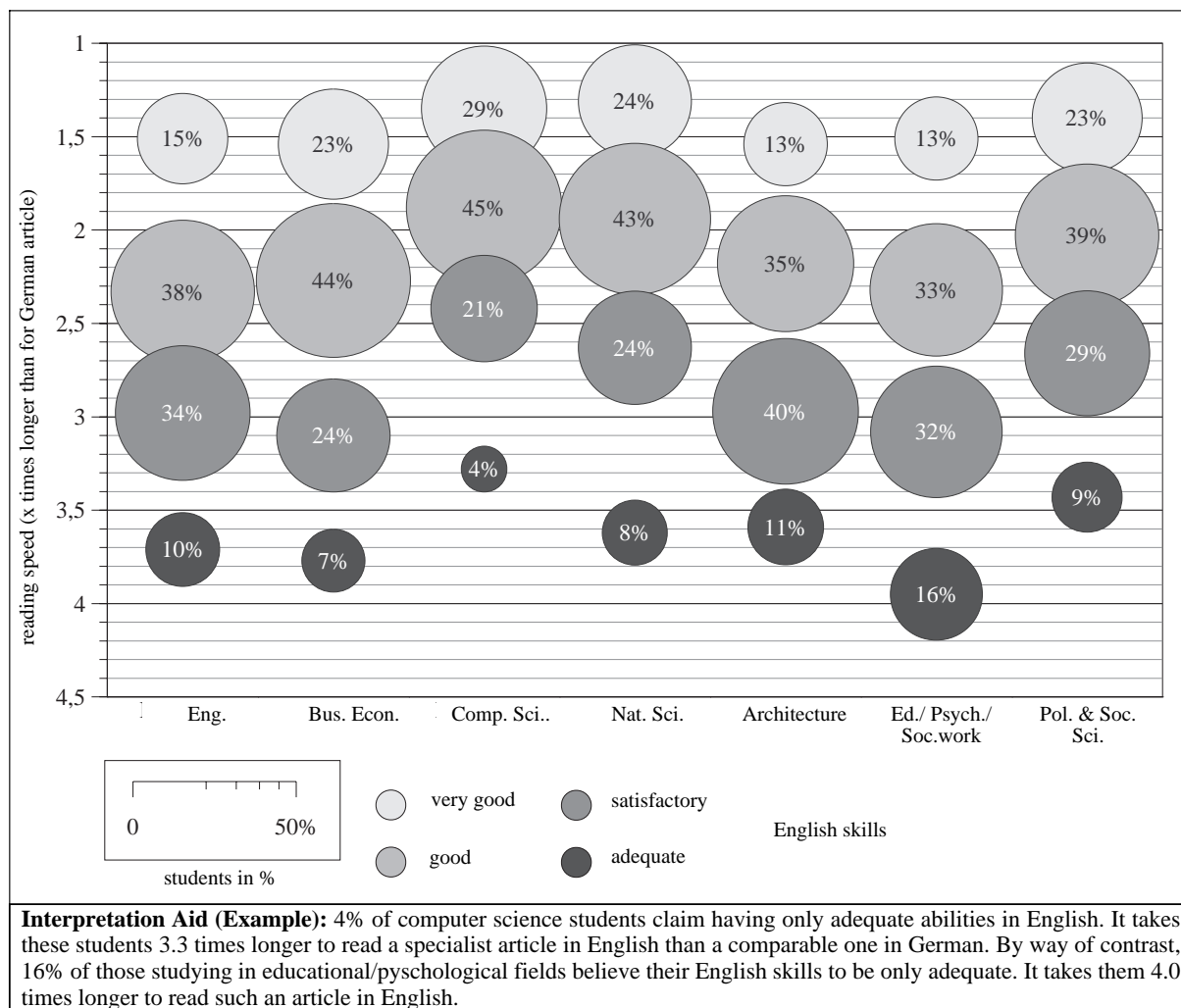
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in research (e.g. at conferences) as well as in business and industry calls for “confident negotiating in English” (job advertisements). It turns out, however, that the abilities of the students polled primarily consisted in reading/comprehending English articles. Among students of computer science and the natural sciences, about 30% can read and comprehend English articles very well, but only about 10% of these students also have very good verbal abilities in English. A similar picture emerges for students of other disciplines. The situation is somewhat better only in the case of students of business economics, 15% of whom have good verbal abilities.

In Natural Sciences and Computer Science, Deeper Knowledge of English Often Not Acquired until During Studies

The foreign language abilities which students had when surveyed were not in all cases acquired

Fig. 5 Self-Assessment of English Skills and Time for Reading Specialist Article in English
as compared with time for reading comparable article in German



Internationalization of Study

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during prior schooling. For example, only a minority of students of computer science and the natural sciences enjoyed foreign language courses in school, and their secondary leaving certificates gave them only below-average marks in their best foreign language. This group, therefore, is not one with any special affinity for foreign language. The only possible explanation for why they are by far the most capable at understanding foreign-language articles is that, despite low inclination, great necessity motivated them to vigorously improve their foreign language abilities.

Recommendations

- A large percentage of students enter higher education with inadequate foreign language abilities. It would therefore appear necessary for institutions of higher education to offer foreign language courses and curricula designed to enable students to acquire the skills they lack.
- English skills are in particular need of improvement. Some students need basic training, while others need to learn specialized terminology.
- Beyond the basic cultivation of reading ability, special importance will have to be

attached to the development and practice of verbal skills. Special courses for students with advanced knowledge of English but underdeveloped verbal skills would be particularly advisable for students of computer science and the natural sciences.

- *Also conceivable would be periods of practical training abroad along with organized language classes.*
- *Even students with a low affinity for foreign language improve their skills appreciably when faced with the need to do so while studying. Therefore, knowledge of foreign languages should be made requisite for successful studies, e.g. by dealing with English literature in seminars, participating in international discussion forums in the Internet, and attending courses held in English by visiting foreign educators. These or similar experiences should best be integrated in the curricula, or offered as extracurricular choices.*
- *School language courses are not succeeding in awakening sufficient interest in, and enjoyment of, foreign language. Moreover, the knowledge being imparted is by no means adequate for the purpose of reading foreign-language periodicals at an acceptable rate or expressing oneself confidently in verbal negotiations. It is therefore imperatively necessary that foreign language teaching at general-education schools be evaluated and improved. Another approach conducive to the imparting of foreign language abilities would be for institutions of higher education to explicitly train “discipline-savvy” foreign language instructors.*
- *The Community objective of the multilingual European citizen should be critically reexamined, even within the larger European context. At the least, thought should be given to more efficacious ways of imparting language skills. Courses for less widespread European languages should be interregionally organized and offered in concentrated form where needed. Such offerings are usually necessary in particular cases such as long-term bilateral research projects, or as a pointed way of preparing for employment.*

6 International Skills and Their Job-Market Relevance

Foreign Experience vs. Shorter Duration of Study

Planning and carrying through on a period of foreign residency for study purposes takes a large investment of time and work. One may also assume that studies are often prolonged as a direct result of foreign study. This can only be avoided by “cutbacks” in other areas (e.g. forfeiting certain other curricular choices). Thus students may find themselves faced with a conflict of interest: Are foreign experience and international skills so important for subsequent employment that they warrant the sacrifice of study or leisure time? Or might other skills (e.g. subject knowledge or practical experience) tend to increase one’s chances of finding employment more? These are the pivotal issues in exploring the relevance of foreign experience for the job market.

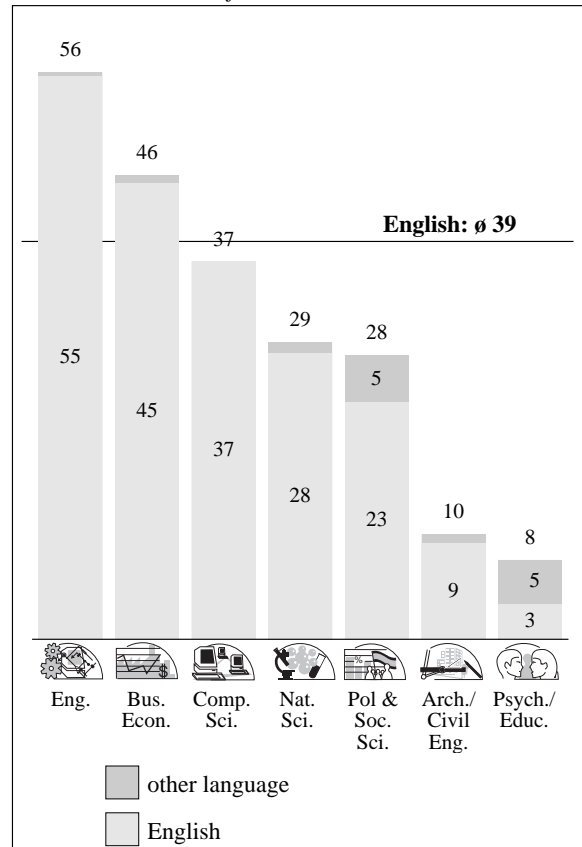
Job Market Demands Good English Skills

The international qualification most frequently called for on the job market is proficiency in English. Nearly 40% of all advertisements make this demand (see Fig. 6). And in the vast majority of ads (90%), “good” or “very good” capabilities are stipulated. Astonishingly, the need for English-speaking graduates is by far the highest in engineering. In 55% of job ads for engineers, English abilities are stipulated. The percentage of ads calling for English-speaking business graduates is appreciably lower, but still high at 45%. In the case of computer science graduates, too, good or very good abilities in English are prerequisite in a third of all cases. This stipulation is exceptionally seldom made in ads addressed to graduates of social work, education and psychology (3%). The story is different for ads directed at sociologists, political scientists and social scientists, where English language ability is expected, after all, in just less than a quarter of all cases. At just under 10%, the need for English-speaking architects and civil engineers is very small.

Demand for Multilingualism Rather Low

To some extent, job ads also call for multilingualism (or rather, bilingualism in nearly all cas-

Fig. 6 Demand for Skills in English or Other Foreign Languages, by Discipline
in % of job advertisements



Internationalization of Study

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es). As many as 15% of all ads for engineers require ability in two or more foreign languages. The percentage is just as high for social scientists, and only somewhat lower for business graduates (12%). Compared with English, the demand for other foreign languages tends to be low, though. Moreover, the demands made on the degree of proficiency in these languages are considerably less stringent; only in isolated cases are good or very good abilities called for. And since these proficiency demands are made for a broad range of different languages, no recommendations can be made as to which languages it would be more opportune to learn.

Frequent Contact with Foreigners in Engineering and Business

The numerous job advertisements indicating that the position to be filled will involve contact with foreigners attest to the authenticity of the frequent call for foreign language ability, dispelling

any notion that such demands arise from arbitrary whims on the part of personnel directors. The highest percentages are once again found in ads for engineers and business graduates (27% and 23%, respectively). In many cases, applicants are also expected to be prepared for international travel: A fifth of the engineering jobs advertised require this, while the figure for business positions is still rather high, at 13%.

No Demand for Foreign Experience?

Foreign experience plays only a marginal role in job ads. The percentage of ads calling for internationally recognized degrees or study in foreign countries as a prerequisite for applying is (as yet) exceedingly low. It may be presumed that the demand for internationally experienced graduates is being met in other ways, and not via job ads.

Hiring Practice: Only Graduates with Job Experience

Students considering their market value as potential employees have to choose among different ways of increasing their attractiveness. Securing international qualifications is only one way; acquiring job experience is another very important one. Among all the degrees examined, there was not a single one for which work experience was not demanded less than 50% of the time. Jobs in business lead in this regard, requiring that applicants have work experience in nearly 80% of all cases. The picture is almost identical for jobs in engineering, with the exception that candidates may have somewhat less experience in that field. The chances of employment are considerably better for graduates of computer science and the natural sciences: 20% of corresponding job ads explicitly invite graduates without any work experience to apply, as well. Still, in just less than a quarter of the ads for these fields, consideration is contingent upon three or more years of work experience. The same is true for 35% of the ads for jobs in architecture, civil engineering and the social sciences. Only in the fields of social work, education and psychology does extended work experience seem to play less of a role.

Job-Market Relevance of English Skills as Perceived by Students

The demands of the labour market can only influence student behaviour if students are indeed

aware of the qualifications being demanded. Students of computer science and the natural sciences perceive of English skills as important, both for job-seeking and professional purposes. Just short of 50% of the students polled from each of these two groups feel ability in English to be important. The fact that foreign experience is not equally important in their eyes indicates that English is used in these disciplines largely for reading periodicals. There is considerably less of a need for English skills in the estimation of students of engineering and business economics (just over 40%). In view of the prevailing processes of integration now taking place in Europe and across the globe, particularly in commerce, it comes as a surprise that the percentage of business students regarding English as important is not considerably larger. English plays almost no role at all in the minds of students of architecture, social work, education and psychology: Only about 15% of these students feel a command of English to be relevant for job-seeking or professional purposes. By way of contrast, about 40% of social scientists rate knowledge of English as very important (see Fig. 7).

Job-Market Relevance of Foreign Experience as Perceived by Students: Sometimes Relevant for Job Seeking, Seldom for Professional Purposes

Students of architecture and computer science regard foreign experience as superfluous – at least in terms of improving one's chances of employment or professional advancement. Only fewer than 10% see foreign experience as very important for job seeking and professional life. A somewhat greater importance is attached to foreign experience by students of the natural sciences and engineering. Nevertheless, students of engineering in particular show considerable divergence in how they rate the significance of foreign experience for job seeking and work. Apparently these students are aware of the demand for international qualifications, but do not take it seriously. A good 20% of them regard foreign experience as highly relevant for job-seeking purposes, but less than 10% feel it to be important for professional life. A nearly identical picture emerges for business students, with the rates being only very slightly higher. This applies to the issue of foreign experience as well as to English language skills. Here, too, it seems students have recognized the call for international skills, but regard it as overstated. Surprisingly, international qualifications are considered most impor-

Fig. 7 Importance of Qualifications for Applying and Working as Seen by Students of Selected Disciplines

Employed scale: **very important = 1**; in %

Qualification	Engineering		Natural Sciences		Political & Social Sci.		Architecture		Busin. Econ.		Computer Science		Psych. Educ.	
	Applying	Working	Applying	Working	Applying	Working	Applying	Working	Applying	Working	Applying	Working	Applying	Working
Subject knowledge	49	49	59	56	41	45	64	80	39	50	55	66	53	59
English skills	43	32	47	44	43	37	14	14	45	31	48	45	17	17
Skills in a second foreign language	10	5	14	8	23	17	7	8	18	11	4	2	9	8
Short duration of study	34	6	34	6	18	2	6	2	21	3	26	2	8	3
Special work experience	36	32	29	22	44	37	59	57	40	29	54	37	61	57
General work experience	18	22	15	16	28	32	21	23	29	28	21	19	30	34
Social adeptness	16	29	19	42	36	55	12	30	23	45	17	33	67	81
Foreign experience	20	9	18	12	26	17	7	5	23	11	10	6	9	8
Good final grades	38	5	61	12	41	7	15	4	38	4	41	4	28	7

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tant by students of the social sciences. About 20% of those polled from this group deem foreign experience relevant for job seeking and professional life. These students also demonstrate much less divergence of opinion on the importance of foreign experience for job-seeking and professional purposes than in the case of business students.

Too Little Recognition of Foreign Experience

Compared with other qualifications – and in this point there is broad agreement between published demands and students' own appraisals – foreign experience is of only limited job-market relevance. Apparently the job market seldom rewards those with foreign experience, or else the significance of such experience is not sufficiently publicized. Evidently students are not hearing about the job-market relevance of such experience from any other sources; otherwise this would be reflected in their views. As a way of improving their chances of finding employment after graduation, foreign study must seem less important to them than work experience.

One can only speculate about the causes of the low recognition of, or demand for, foreign experience. It is conceivable that, in view of a limited supply on the German labour market, companies are bypassing the domestic market completely and seeking the candidates they need abroad. Another possible scenario is that internationally positioned jobs are being filled – after appropriate training – with employees who have already demonstrated their worth and who can be expected to identify themselves with the company. Yet another possibility is that decision-makers in commerce and the public sector alike have been caught off balance by the floodwaters of internationalization, and have been assigning less importance to foreign experience than it deserves.

Discrepancies between Published Demand and Demand as Perceived by Students

In *engineering professions* there is a very great demand for international skills (ability in English as well as foreign experience, see Fig. 8a and Fig. 8b). At the same time, the significance attached to such qualifications by students, themselves, is remarkably low, meaning that a vast

Fig. 8a Importance of Qualifications for Applying/Working as Seen by Students of Selected Disciplines vs. Demand in Job Advertisements

continued in Fig. 8b

Students believing special job experience, English skills, foreign experience and social skills to be "very important" for applying/working, and demand as expressed in job advertisements; in %

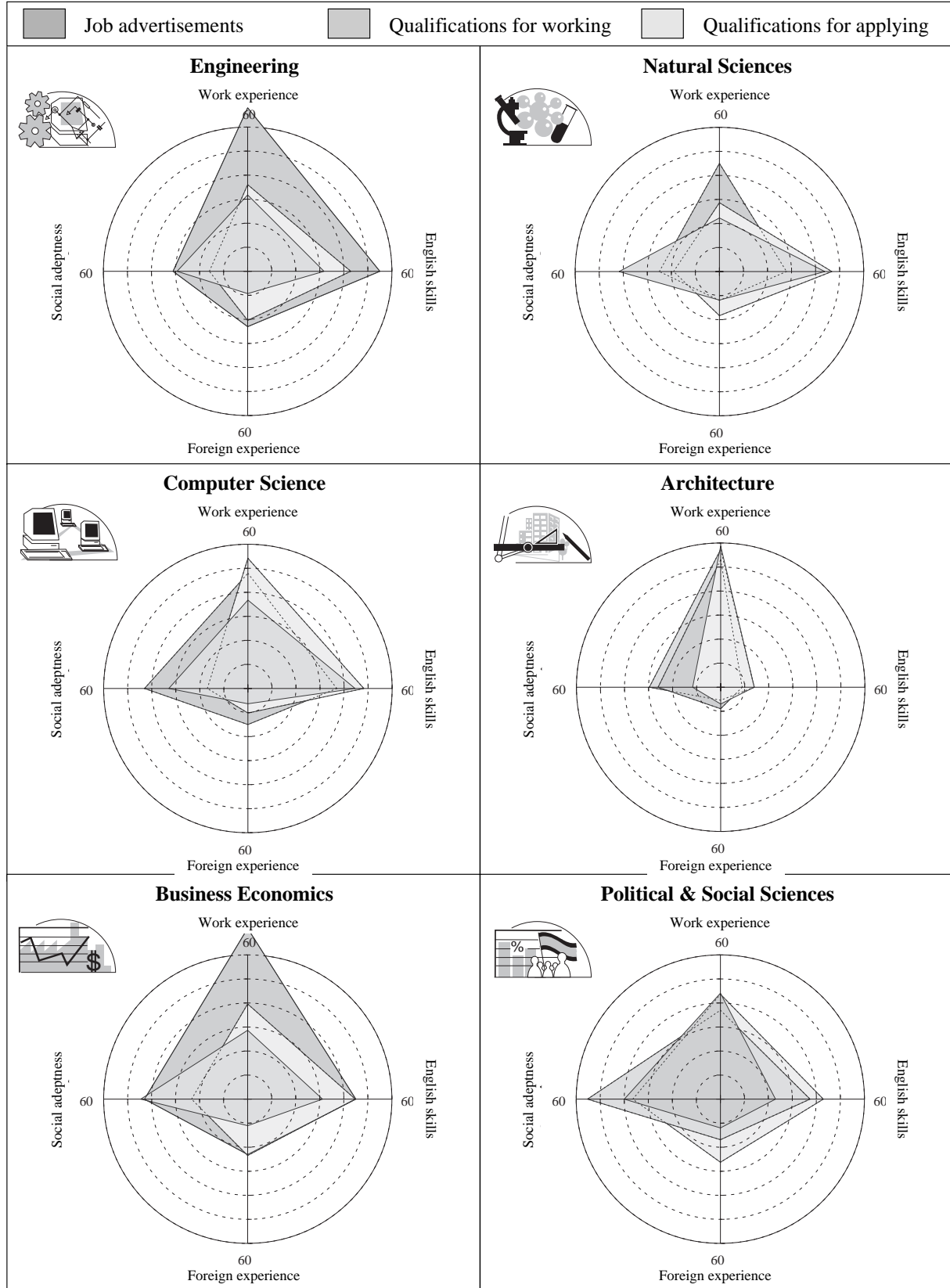
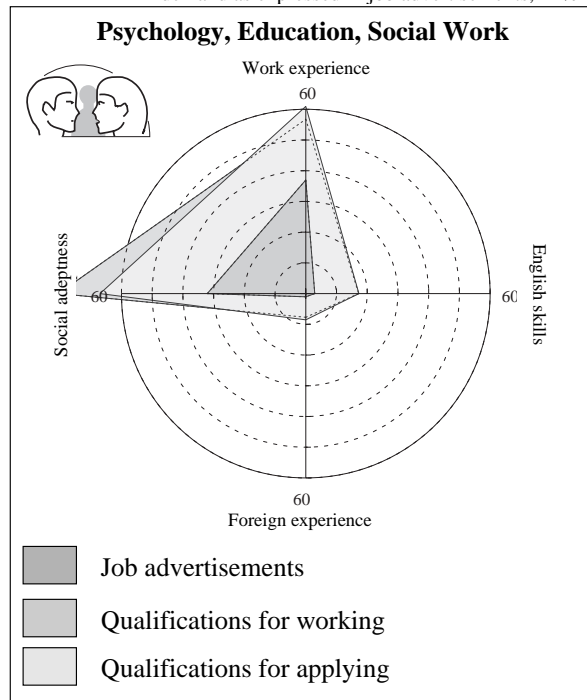


Fig. 8b Student Perception of Importance of Qualifications for Applying and Working vs. Demand in Job Advertisements

Students believing special job experience, English skills, foreign experience and social skills to be "very important" for applying/working, and demand as expressed in job advertisements; in %



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disparity exists between published demand and demand as perceived by engineering students. Even while job ads are painting the need for internationally versed engineers on the horizon, it seems that students have not yet opened their eyes enough to see it.

In *business economics*, too, international qualifications play a comparatively major role. Unlike their counterparts in engineering, students of business are largely aware of this demand, although they deem it exaggerated as far as their intended careers are concerned.

The picture for students of the *social sciences* differs notably from that of all other disciplines in that these students considerably overestimate the significance of international qualifications. It is conceivable that this reflects the personal inclinations of many students – a sort of “wishful thinking” which has not (or not yet) found any corresponding echo on the job market.

In all other disciplines for which polling was done, there is substantial agreement between the

published demands for international qualifications and students' perceptions, with students of *computer science* and the *natural sciences* concurring on a great demand for English skills, and students of *architecture*, *education* and *psychology* agreeing on a virtually non-existent demand for international qualifications.

Recommendations

- *The demand for international qualifications on the job market differs widely in different disciplines. In the case of graduates of engineering and business economics, for example, this demand is very high, while it is very low for graduates of social work, education, psychology and architecture. Any measures promoting mobility or curricular internationalization should take this striking distinction into account, and should not be applied uniformly to all disciplines.*
- *Also in light of the job market, students of engineering and business economics would be extremely well advised to acquire proficiency in English, in particular, as well as to gather foreign experience. In both disciplines, students are underestimating the significance of international qualifications for later professional life. This could be remedied by measures which plainly reveal professional demands to students while they are still studying (e.g. by early periods of practical training, advisory services, or special presentations held by representatives from trade and industry).*
- *For students of social work, education, psychology and architecture, there are not as yet any clear job-market incentives for a special commitment to internationality. If the objective is to achieve a greater internationalization of these students, then motives of a more personal nature will have to be appealed to. It would be advisable to offer elective choices specifically tailored to the motives of, and impediments experienced by, these students (see also Section 7).*
- *Multilingualism is currently of importance for only a small segment of the job market. Although it can certainly increase one's chances of finding employment in isolated cases, it does not represent a widely sought qualification. Action in this context there-*

fore seems unnecessary, at least as concerns the job market.

- *The improvement of English skills, on the other hand, is highly essential. In view of job market demands, appropriate measures should be aimed at raising reading abilities and particularly verbal and negotiating skills.*

- *On the whole, the job market appears to reward foreign experience only to a very limited degree. Of importance here is that actual needs be publicized to a greater extent than has been the case. Companies need help in grasping the economic essentiality of having employees with foreign experience. This calls for a two-pronged public relations effort (towards students and employers), one avenue of which could be the publication of cases of "good practice".*

7 Foreign Mobility by Students

Nearly All Students Recognize Worth of Periods Abroad

There is a widespread – albeit merely proclamatory – consensus among students that residing abroad for study-related or professional purposes is worthwhile *in general*. 97% of those surveyed (Internationalization of Study) responded to a corresponding question with “yes” (see Fig. 9). There is thus no need for educational policies seeking to persuade students to recognize the merit of such residencies; in this sense, political intentions are in harmony with students’ perceptions.

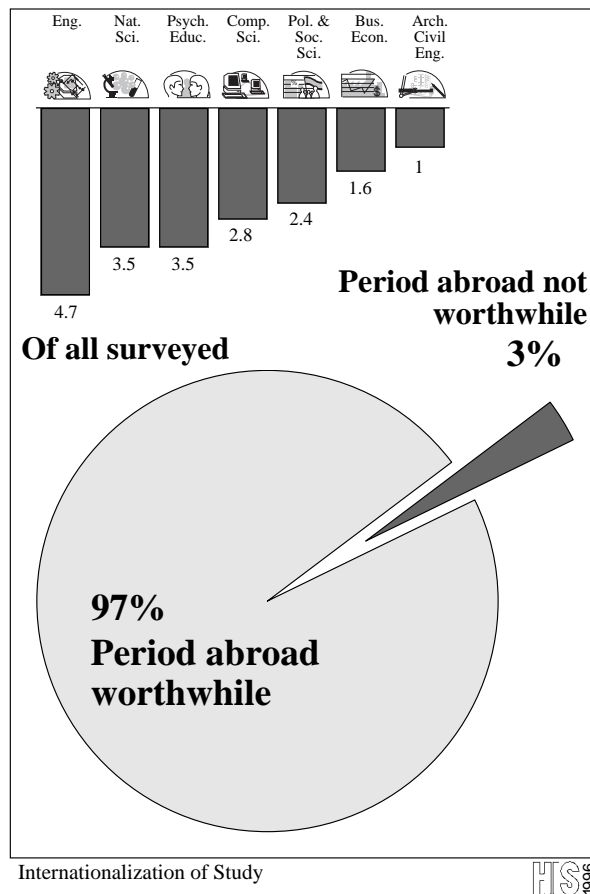
Large Incidence of Other Non-Touristic Forms of Foreign Experience

An international outlook and associated skills cannot be cultivated merely by means of *study-related* experiences abroad; other types of experience not directly related to study can engender a deeper understanding of foreign cultures, thus improving communication among nations. Among the various forms of non-touristic experience, school exchange programmes are the foremost. A quarter of all respondents indicate having had this type of foreign experience while still in school. A fifth had taken language-learning trips; about 10% had spent some time living in a foreign country. Among the students polled, 50% had spent time abroad for non-study and non-touristic purposes, with considerable variation across the different disciplines. Comparatively fewer students of engineering (40%) had engaged in such experiences, while nearly 70% of those studying political science or the social sciences had done so. Below-average rates are found for the entire range of natural sciences.

Other Forms of Non-Touristic Foreign Experience Promote Attainment of International Qualifications

The value judgements made by students go to show that international qualifications are also enhanced by non-study-related residencies. In the “tourists only” group, 20% report a much better

Fig. 9 Do you feel spending a period abroad for the purpose of study or work to be worthwhile in general?
in %



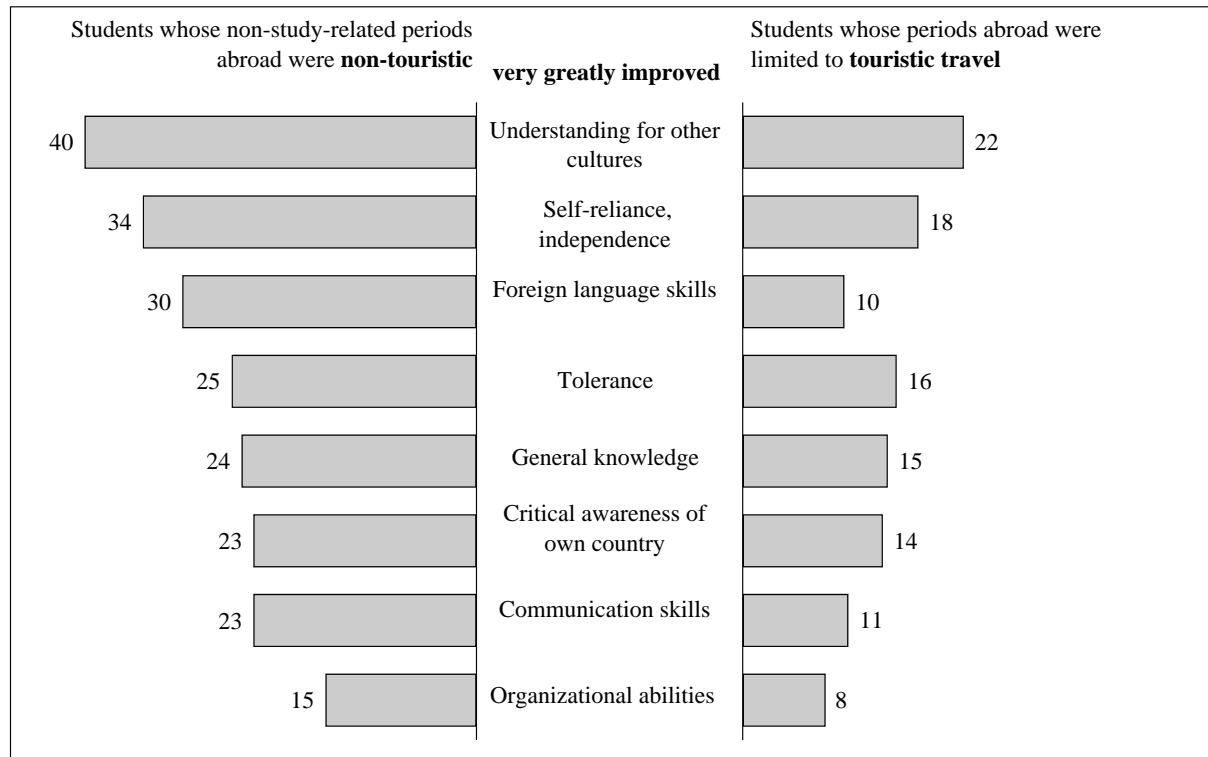
understanding of foreign cultures and ways of living/working as a result of foreign travel. In the group of students having also spent other non-study-related time abroad, 40% feel this way (see Fig. 10). It is especially striking to note the differing perceptions regarding the improvement of foreign language skills: Only 10% of touristic trips are felt to have resulted in great improvement, whereas 30% of non-touristic residencies are reported to have had this effect. The significance of such non-study-related, non-touristic foreign experience for the internationalization of students is thus relatively great. Such experience generally occurs prior to studying, and may be regarded as “paving the way” for the internationalization of study and encouraging greater receptiveness for it.

1994: 22% of Students Abroad for Study Purposes

The following rates of foreign study are based on upper-semester students (as of 8th semester for

Fig. 10 Enrichment and Betterment of Qualifications as a Result of Periods Abroad for Non-Study Purposes

Percentage of students experiencing very great enrichment in the specified areas



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universities; as of 6th semester for Fachhochschulen).

In 1994, a total of 22% of all upper-semester students were abroad for study purposes; 9% were enrolled at foreign places of learning. This means that the policy objective of a 10% rate of foreign study (at some point during the student career) was only narrowly missed in 1994. This goal may be presumed to have been reached in 1996. 10% of students had received practical training abroad, 5% had taken a trip for language-learning purposes, and 6% had spent time abroad for some other study-related reason (Fig. 11).

The "Mobile Ones": Students of Languages/Linguistics, the Humanities and Medicine

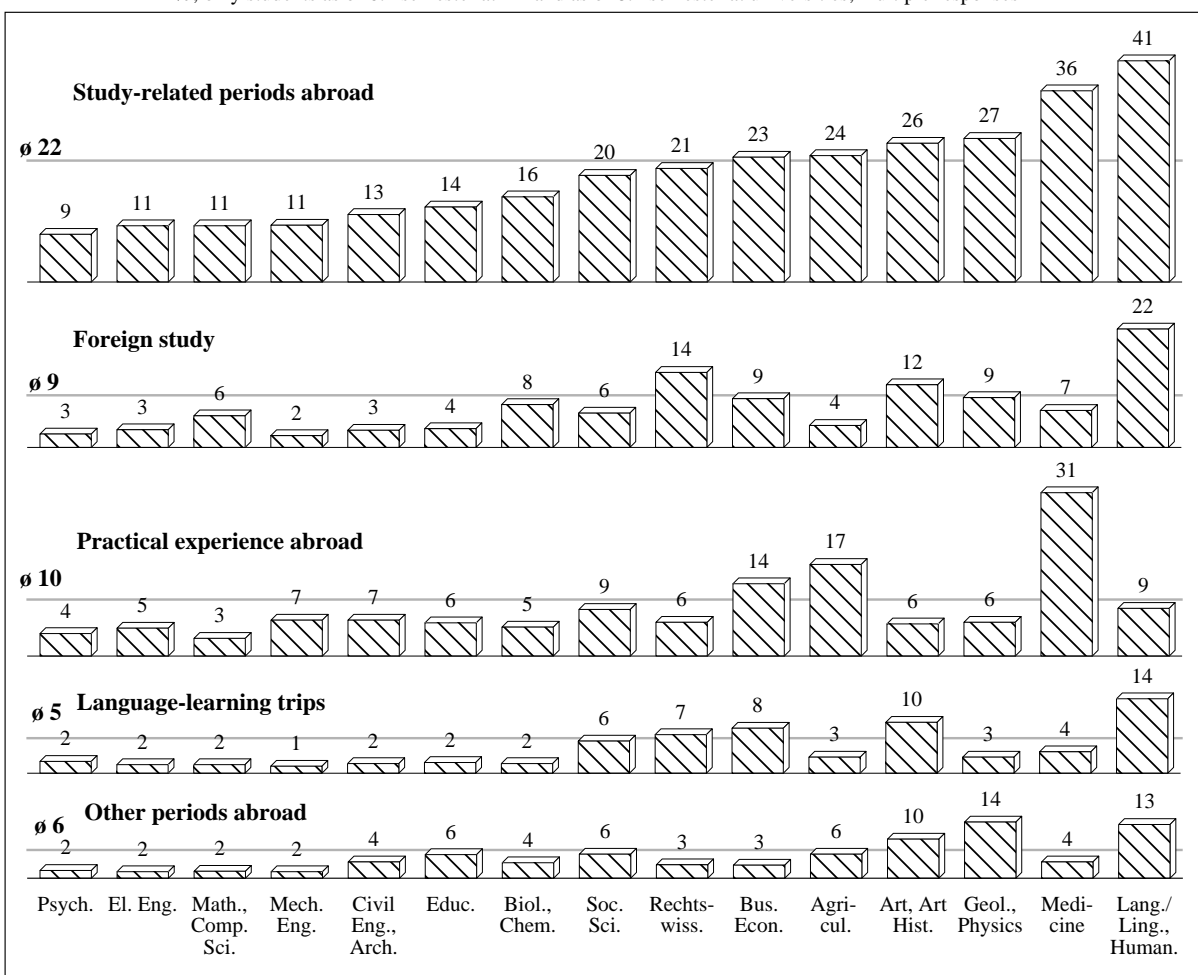
Not all students are equally disposed to go abroad. Quite the contrary: Major differences exist across different fields of study. Students of psychology, for example, range far below average with a participation rate of 9% for study-re-

lated foreign experience, while the rate for students of languages/linguistics and the humanities is far above average at 40%. Interestingly, below-average participation is found in two diametrically opposed disciplinary contexts: in social research in the form of the more practically oriented fields of psychology and education, on the one hand, and in nearly the entire range of technical and scientific disciplines, on the other hand. Alongside students of languages/linguistics and the humanities, medical students are also distinguished by a distinctly above-average rate of study-related foreign experience (36%). Students of business economics may be regarded as representing the median (23%).

Three Distinct Influences: Gender, Type of Institution, Social Background

Women go abroad more often than men, and this is true for all varieties of study-related foreign experience. They take language courses in foreign countries twice as frequently as men (8% for women vs. 4% for men). 11% of all female students engage in foreign study (7% of males).

Fig. 11 Study-Related Periods Abroad by Discipline
in %; only students as of 6th semester at FH and as of 8th semester at universities; multiple responses



Internationalization of Study; source: 14th Social Survey

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The overall rate of study-related foreign experience is 27% for women, and only 18% for men.

The rate of such experience is 25% for university students, and only 11% for Fachhochschule students. Just under 3% of those studying at a Fachhochschule engage in foreign study; the figure for university students is more than three times as great. The considerably lesser foreign mobility of Fachhochschule students also manifests itself when comparing rates of foreign study for equivalent disciplines, e.g. 0.6% for mechanical engineering at the Fachhochschule, and 5.3% for the same discipline at the university.

The impact of social background is highly apparent. Students from families with appropriate social and economic resources are more likely to go abroad for study-related purposes. On the whole, students with lower social backgrounds

do so only half as often as their counterparts with upper social backgrounds.

It is demonstrable how each of the three factors of gender, type of institution and social background has its own distinct impact. A cumulative effect of these impacts is the male-dominated student body of the Fachhochschule, along with a preponderance of students from "educationally more remote" backgrounds. The three factors combine to bring about the very low rates of foreign study for this type of institution, even while their individual impacts remain discernible.

Parental income, too, has a profound influence on students' foreign mobility. Among those students whose parents net monthly income does not exceed DM 4,000, only between 16% and 18% go abroad for study-related purposes, while somewhere between 24% and 30% of those stu-

dents believing their parents' net income to be DM 5,000 or more do so.

Once Mobile, Forever Mobile

Previous foreign experience appears to encourage students to seek more. While the vast majority of students not yet having been abroad at all for study purposes have no intention of doing so in the future, either (only 14% having any definite plans), further foreign residencies are planned by a third of those students with previous experience.

These intentions undergo a shift during the student career: At the beginning, a relatively large percentage of students (over 50%) intend to spend a study-related period abroad. This percentage remains nearly constant up to about the 4th semester, after which it falls to far less than 50% in the 5th and 6th, to less than 40% in the 7th and 8th, and to 30% in the 9th and 10th semesters, ending at only 20% in advanced semesters (i.e. > 15th, see Fig. 12).

Considerable Rise in Foreign Mobility from 1994 to 1996

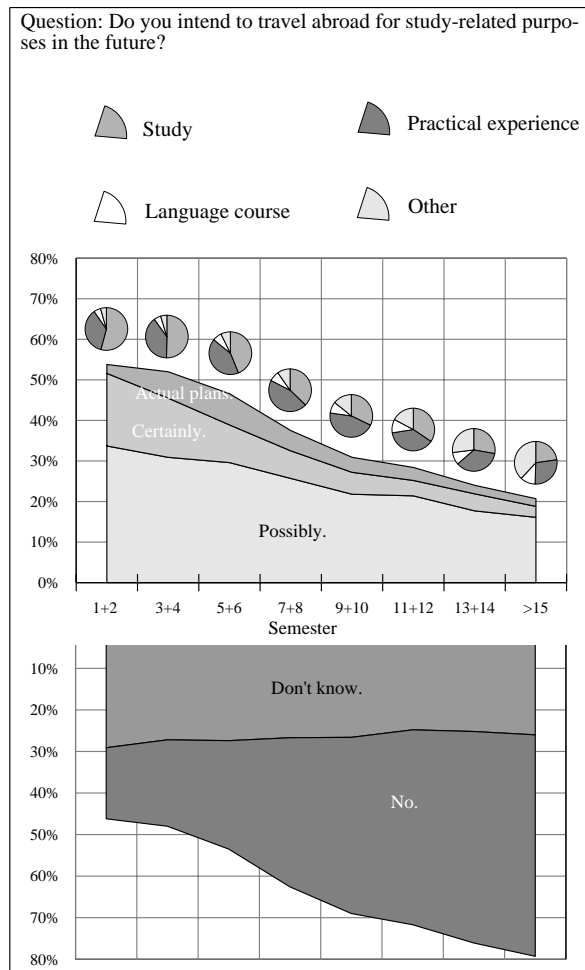
Far more students are now venturing abroad than was the case only two years ago, and this is true of all disciplines examined. The steepest increases are found for students of architecture (16% in 1994; 33% in 1996), but a sharp rise also occurred in the natural sciences (16% in 1994; 25% in 1996). Even the traditionally "abstinent" engineers have now taken considerable strides forward, with just under 11% of them managing to go abroad in 1994, and as many as 17% doing so in 1996. The smallest rises are found in psychology, social work and education (from 12% to 16%) and computer science (from 8% to 10%). These figures should be viewed as indicative of prevailing tendencies.

It should be noted that, particularly in the past few years, integrated foreign programmes have given a special impetus to student mobility. The support of integrated foreign study provided by DAAD and ERASMUS programmes has been a major force in this development.

This type of promotion was better received at Fachhochschulen than at universities. Out of every 100 periods of foreign residency, 15 were obligatorily required as part of a Fachhochschule

Fig. 12 Foreign-Related Plans of Students not yet Abroad over Time

"As-if" cohorts, in %



Internationalization of Study; source: 14th Social Survey

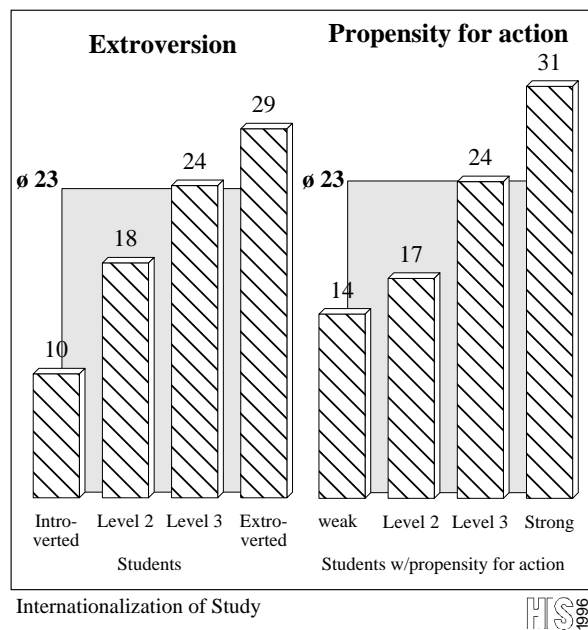


curriculum, and 4 as part of a university curriculum. In business economics, the Fachhochschule's mandatory participation rate is far above average (FH = 25/100; university = 8/100).

Foreign Mobility Strongly Affected by Student Personality and Mind-Set in Field of Study

Students' foreign mobility also depends on their personality make-up. The impact of this factor was determined using the personality operants "extroversion" and the subordinate trait "propensity for action". While 10% of introverted students have spent study-related time abroad, the figure for extroverted students is nearly three times greater at 29% (see Fig. 13). The personality trait "propensity for action" has an equally

Fig. 13 Study-Related Periods Abroad by Personality Traits for the Various Groups Surveyed
in % of students of each group



strong effect. Personality structure has an even greater bearing on students' future intentions with regard to foreign study (13 % of introverted students plan to spend study-related time abroad, while 41% of extroverted students intend to do so).

By examining study disciplines in terms of their share of extroverted, dynamic students, some clear distinctions emerge. While disciplines with a great degree of foreign mobility (such as architecture and business economics) have correspondingly large percentages of extroverted, dynamic students, the discipline with the lowest amount of foreign mobility, computer science, is found to have a much smaller percentage of students of this personality type. Thus the varying rates of foreign study for the different disciplines also seem to be understandable in terms of the different study choices made by introverted and extroverted students. One may assume these personality traits to influence the disciplines which students choose to study.

Introverted Students Prefer Group Residencies

How can an internationalization of study also be achieved in disciplines characterized by a large share of introverted, less dynamic students? One key to this lies in students' responses to the ques-

tion whether a "group programme for students of their discipline" could have helped them in pursuing a period of foreign residency. More than two thirds of the less dynamic, introverted students believe that such a group programme could have been a big or very big help to them, while only slightly more than half of the very dynamic, extroverted students feel this way. Introverted students appear more likely to consider going abroad if they can do so in the security of a group.

Foreign Mobility Hindered by Heavy Job Loads

The less students are burdened with having to earn money, the more likely they are to go abroad for study purposes. After preliminary examinations, a good quarter of the financially better situated students went abroad for study reasons, while only a fifth of their counterparts of lesser means did so. An even closer correlation is found to exist with students' job loads: 29% of those with a low rate of self-financing (i.e. from personal earnings) sought foreign experience, while only 15% of those with a high rate of self-financing did so.

Foreign Language Ability as Most Significant Determinant of Mobility

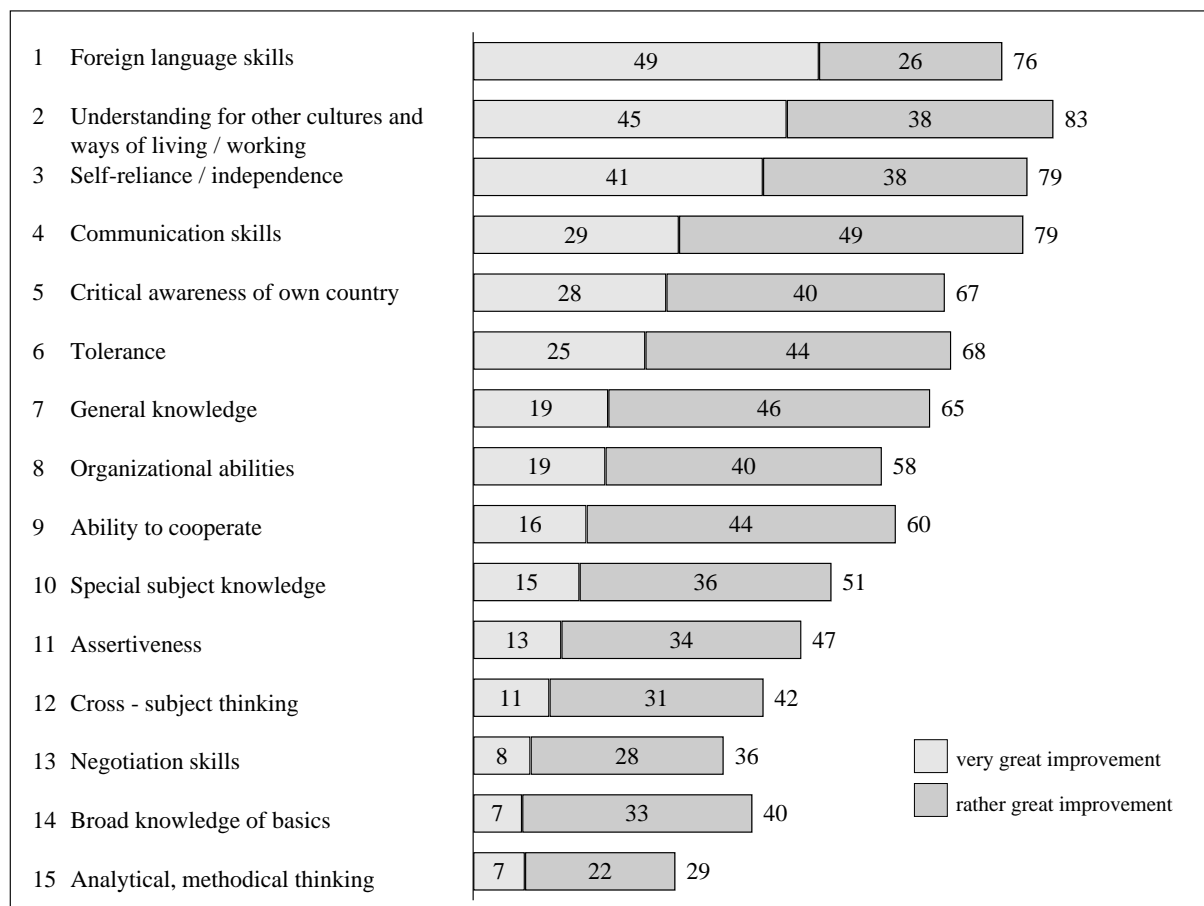
Foreign language ability has a very pronounced effect on mobility: 30% of students with a good command of English go abroad for study purposes, while as few as 10% of those with average or poor skills found their way abroad. The percentage of students with average or poor English skills is 41% and by no means small, thus this correlation has major consequences.

Perception of Job-Market Demands Affects Foreign Mobility

The suppositions held by students about job market demands have a distinct influence on foreign mobility. Students who believe foreign experience to be of great importance for later professional life go abroad in nearly 50% of all cases. Students deeming foreign experience to be of no importance whatsoever go abroad in only 10% of all cases. Student perceptions about the importance of "short study duration" as an employment criterion have exactly the opposite effect: 19% of those students who feel short study time

Fig. 14 Yields of Study-Related Foreign Experience

Percentage of students who feel they achieved "very great" or "rather great" improvement in the specified areas



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to be very important for job-seeking purposes go abroad for study. Those in the comparison group (i.e. who feel short study time to be of no importance) study abroad in 27% of all cases.

Major Motivating Factors: Gaining Foreign Language Proficiency, Improving Job Opportunities, Getting to Know Foreign Cultures

The most important motivating factor for foreign study is the desire to improve foreign language skills. Students of all disciplines examined agree on this. For about three quarters of the respondents, improving foreign language skills is a "very important" reason for engaging in foreign study. About half of the respondents desire to improve their skills in this way. For somewhat fewer than half of the students, the chance to get to know foreign cultures is a very important factor. Just under 40% would like to learn how to

cope in a foreign environment. About a third would like to seek contact with foreign individuals. All other factors such as "learning to think in other ways", "deepening/widening knowledge of one's field", "becoming more self-confident", etc., play less of a role in motivating students to go abroad.

Major Yields: Improvement of Foreign Language Skills, Understanding of Foreign Cultures, Self-Reliance/Independence

Of all students spending study-related time abroad, 50% feel their foreign language skills have improved very greatly as a result (see Fig. 14). 45% consider their understanding of foreign cultures to have improved very greatly, and a good 40% feel the same about their self-sufficiency and independence. Much less mention is made of all other types of benefits. The improve-

ment of communicating abilities, the gaining of a critical awareness of one's own country, and increased tolerance are also of some significance.

Yields vs. Period of Residency

No matter what the benefit or qualification: the longer the stay, the greater the yields for the student. The improvement of foreign language skills and understanding for other cultures is found to proceed in periodical leaps and bounds: A steep increase in yields occurs after the three-month mark, and another after a period of nine months. Sojourns in excess of a year appear not to lead to any further increase of yields, though.

For the most part, it appears that students can only acquire specialized expertise in their fields during extended residencies. 7% of those staying between seven and nine months believe to have acquired such expertise, while 26% of those staying for more than a year are of this opinion. It seems that only after a period of about a year in the foreign environment can students be considered "acclimatized", e.g. adequately proficient in the foreign language and with an established circle of acquaintances. Seemingly not until after a preliminary phase of a year of study abroad can a student begin to achieve a similar enhancement of specialized knowledge as he/she would when studying at home.

Major Obstacles: Recognition of Foreign Credits, Costs, Separation from Partner/Children/Friends Lost Study Time, Lack of Initiative

Relatively few students returning from abroad report any problems. Only those away for 10 months or more experience any appreciable difficulties; about a quarter cite major difficulties with getting foreign credits recognized.

The added financial burdens associated with foreign study pose the greatest obstacle to foreign mobility. About a third of the respondents feel the additional financial burden to be a very large impediment, and another quarter regard it as rather large (see Fig. 15). Another major factor is separation from one's partner, children or friends. 22% feel this to be a very large – and 25% a rather large – impediment. At 19%, only somewhat fewer students refrained from foreign

study because they very strongly feared losing study time as a result (another 22% rather strongly feared this). Forfeiting financial support and earnings is stated by 17% of students as being a very large impediment (rather large by 19%). About a sixth of the respondents were very strongly discouraged from engaging in foreign study by their own lack of initiative; another quarter was rather strongly discouraged by this. Thus almost 40% of all those surveyed are found to have abstained from foreign experience because they did not have the drive to initiate the necessary preliminary steps.

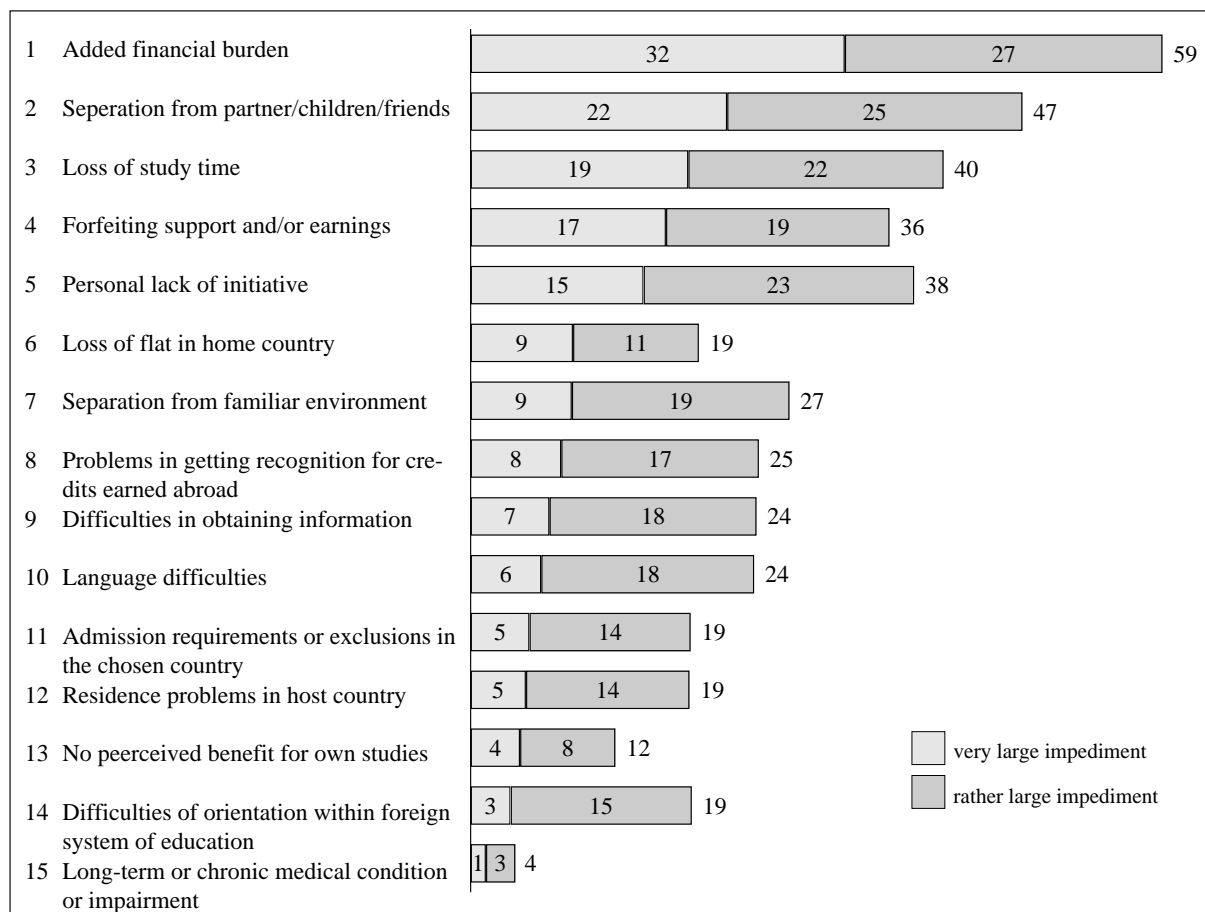
Major Incentives: Scholarships, Foreign Jobs, Strong Urging, Group Programmes

50% of the students surveyed believe an adequate scholarship would have greatly helped them to participate in foreign study (see Fig. 16). A large share of students would also be prepared to finance foreign study themselves: A third indicated foreign job opportunities would have been a great help, and another third would have found this to be a rather great help. Only slightly fewer students feel they would have been greatly or rather greatly aided by less bureaucratic procedures. Group programmes for students of the same field of study are considered highly significant by a quarter of those polled, and rather significant by somewhat more than another quarter. Strong urging by one's institution of higher education would have been instrumental in motivating students in more than half of all cases: A good 40% of students view mandatory language courses as a potential help. Roughly the same percentage of students would have accepted help in the form of better language course options. Nearly 40% of students could also imagine that more contact with foreign students would have helped them in pursuing foreign study.

Recommendations

- *The internationalization of study begins with the internationalization of schooling. The groundwork for international interest and receptiveness towards foreign mobility should already be laid in school. Contact with pupils from other countries is a very suitable vehicle; it is therefore advisable to expand school exchange programmes and*

Fig. 15 Obstacles to Study-Related Foreign Experience
Students perceiving impediments to be "very large" or "rather large", in %



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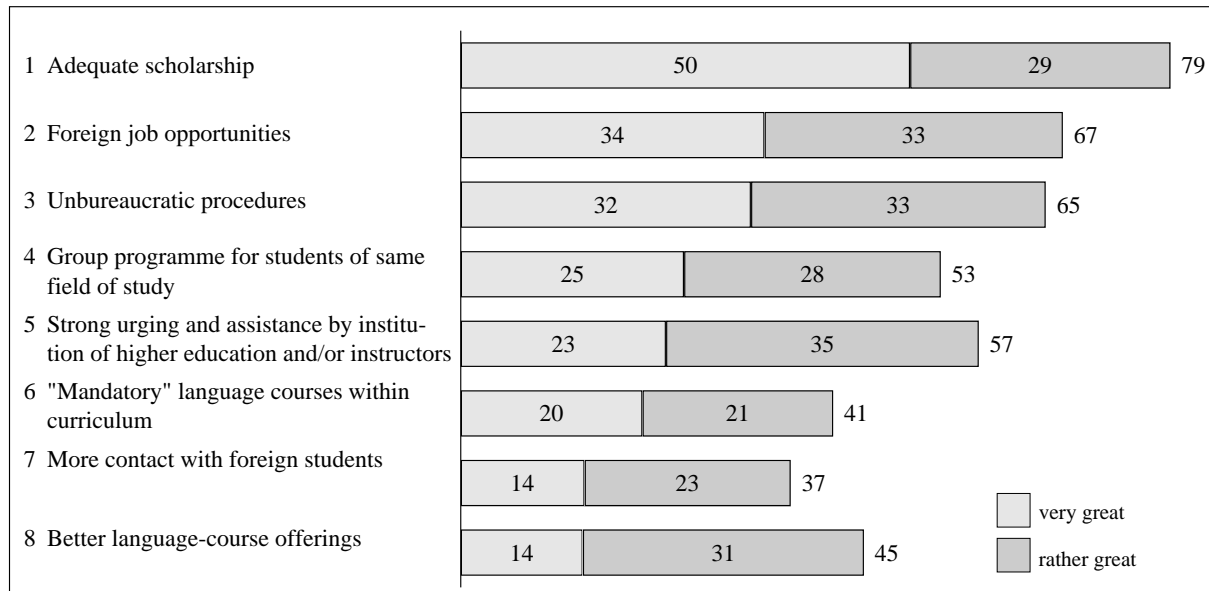
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make more use of existing ones, such as SOKRATES' "Comenius" programme.

- In addition to initiatives promoting foreign mobility for all students, specific groups should also be targeted. Groups deserving of special attention are: students of psychology, education, social work, engineering and the natural sciences, males students, students from lower social backgrounds, and students (or rather, study) at Fachhochschulen.*
- Also when it comes to foreign mobility by students, it appears the first step is the hardest. For this reason, as many students as possible should be strongly encouraged to take small tastes of foreign experience. Such "appetizers" will presumably set off a self-sustaining process by which students will then further their own internationalization.*
- Intervention should occur at an early phase – if possible at the onset of studies, and by all means prior to the completion of preliminary examinations. The later students are presented with options, the lower their chances of being accepted. Students of upper semesters should be made aware of alternate paths to foreign experience, for it becomes increasingly difficult for them to be accepted for conventional forms of foreign study and practical training with increasing semesters. Shorter residencies might be a possibility in such cases, e.g. brief trips for participation in international colloquia, excursions, internships, etc.*
- A wider range of explicitly post-graduate foreign opportunities should be offered. These could be in the form of traineeships or other hands-on experiences. The option of gaining foreign experience (and additional job qualifications) after graduation*

Fig. 16 Potential Aids to Seeking Foreign Experience

Students feeling that the specified factors would have been a "very great" or "rather great" help to them, in %



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represents a sensible use of time during ever longer job-seeking phases.

- *For students of the computer and natural sciences, options should be created which reflect the high percentage of introverted students in these disciplines. Introverted students are more likely to embark upon foreign experience in the presumed security of a group. In the case of such programmes, the characteristic of "all-round support" should receive greater emphasis.*
- *Individuals whose foreign language skills are not good do not venture abroad. Also for the sake of encouraging students' foreign mobility, it is thus urgently advisable for institutions of higher education to set up language courses aimed specifically at coaching verbal abilities.*
- *In connection with encouraging foreign mobility on the part of students, the high status conferred in public debate to short periods of study is proving exceedingly counterproductive. Educational policy-makers and commerce, alike, are called upon to declare that going abroad for study-related purposes is a way of gaining additional and desirable qualifications, and is thus an acceptable reason for a slight prolongation of study.*
- *Students in many disciplines feel that foreign experience is not rewarded by the job market. Here a dual strategy appears to be called for: On the one hand, the existing demand for international qualifications needs to be more clearly communicated, e.g. via student counselling and vocational advisory services, and on the other hand, the practical merits of foreign experience need to be impressed upon employers. Examples of "good practice" at successful companies should be publicized in appropriate circles.*
- *Many students let themselves be inhibited from seeking foreign experience due to a certain lack of personal initiative. Such inhibitions could be overcome by curricular integration of brief periods of foreign residency and language courses, strong urging on the part of universities and educators, and other persuasive campaigns.*
- *An analysis of obstacles to foreign experience and their possible remedies reveals that students of different disciplines regard quite different aspects as significant. Therefore, any attempts at internationalizing study should begin with an analysis of motivational profiles, impediments and possible remedies broken down by fields of study so that expedient solutions can be developed.*

for each context. Not all promotional measures are received equally well by all students. Initiatives targeted at specific fields are more likely to succeed.

- *To a considerable degree, foreign mobility by students is hindered by insufficient funds. A stepping up of scholarship programmes would therefore be highly desirable. In terms of amount, scholarships would have to provide a certain basic level of financial security. The “splitting” of ERASMUS scholarships is increasingly leading to undesirable, socially selective side effects.*
- *Students are very open to the idea of earning their own keep abroad. The establishment of job placement services or the provision of assistance in seeking jobs abroad would be promising measures towards increasing foreign mobility by students.*

8 International Study: Models for the Future

Promoting the European Dimension

Even if the 10% level for European foreign study is one day surpassed, one can realistically assume that the vast majority of students will still fail to enjoy the benefit of foreign study in the course of their student careers. In an effort to make the international experience more of a reality for students who are either subjectively or objectively not able to spend any study-related time abroad, recommendations by the Council of Science, the Federal Ministry of Education, Science, Research and Technology, the OECD and the European Community have been taken up to create scenarios by which curricular internationalization can be achieved. These models constitute a array of different approaches which could conceivably be used for putting a “European dimension” into German higher education.

These models also present curricular possibilities which could now be promoted within the new ERASMUS programme. In this part of the programme, the incentives are raised for universities to add a European slant to courses patronized by students not directly participating in any mobility programmes.

New Models of Study for Conveying the European Dimension

In the current study, the spectrum of new internationalized possibilities was tested for student acceptance. The following concepts were to be evaluated (see also overview, p. 34):

- *Language course: “English for Beginners”*
(2-semester refresher course for basic English skills)
- *Language course: “Technical English”*
(acquisition of language skills for comprehending specialized texts in English)
- *Language course: “Unorthodox Language”*
(language courses in less widespread European languages)

- *Model: “Guest Lecturer”*
(as a regular part of all curricula)
- *Unit: “European Integration” in English*
(exploring European citizenship parallel to main studies)
- *Unit: “European Integration”, in German*
(as above)
- *“Parallel Seminar”*
(developing awareness for cultural differences in how learning is imparted)
- *“Conference on Parallel Seminar”*
(international conference for discussion of Parallel Seminar findings)
- *“Virtual Seminar”*
(classes employing new telecommunication technologies)
- *“One-Semester Compact Seminar”*
with students from different countries
(whole-day classes held 3-5 days a week)
- *“International Classroom” in Germany*
(compact seminar of several days’ duration with participation by foreign students)
- *“International Classroom” abroad*
(internationally mixed groups, as above, but held at foreign university)
- *“Foreign Aid Project”*
(international study project calling for international solidarity)
- *“Group Programme”*
(taking advantage of curricular offerings at host university with all-round support as typical for American exchange programmes)
- *“Dual Degree”*
(group programme with option of parallel acquisition of foreign degree)
- *“European Studies”*
(a new, interdisciplinary curriculum for becoming a specialist in European issues)

The above models pursue different ends. The language courses are purely instrumental in nature. Models such as “Guest Lecturer”, “European Integration”, “Parallel Seminar at Domestic

Models of Internationalized Study; Questions 28 - 40 of Questionnaire

Imagine the following study options were offered at your place of study. Would you take advantage of them? Or would you have done so if they had been available at an earlier point in time?

(1= quite certain; ...; 5 = not at all)

Guest Lecturer: A well-known capacity from a foreign European university is offering a one-semester seminar on a very interesting topic not otherwise offered in this quality at your place of study. The seminar will be taught in English.

Language Course "Unorthodox Language": A four-semester course is being offered on a less widespread European language (e.g. Danish or Greek). You will gain adequate skills for daily usage and the ability to read and comprehend specialized texts on your own.

The acquired qualifications will be certified.

Language Course "Technical English": Based on medium to good English skills, a two-semester course will enable you to read and comprehend specialized texts on your own.

Language Course "English for Beginners": English has never been your strong point. In a two-semester basic course, you can acquire elementary English skills and thus prepare yourself for the language course Technical English.

"International Classroom": In a one-semester intensive seminar you will have the opportunity to learn and conduct research together with students of your discipline from other European countries (e.g. Finland, Spain and France). The project includes access to a "classroom" equipped with reference works, computers and other necessary working materials. Work is to be done 8 hours a day, for 5 days a week. Each day is to begin with a 1 1/2 hour introduction by a visiting professor from one of the participating countries, followed by independent work in small groups of mixed nationality. The project language is English. Participation in preparatory language courses is possible.

...And what if work were only to be done 3 days a week?

"International Classroom" Abroad: There is an opportunity to participate in a similar project abroad (see previous question). You will leave Germany for half a year. You will be provided with accommodations (with students from the host country), and your travel expenses will be paid. You will have to pay for your living expenses, yourself. You will be prepared for your stay abroad. You will be officially credited for the stay. If you receive BAföG aid, it will continue to be paid.

Group Programme: There is an opportunity to pursue a portion of your studies at a partner university abroad along with other students from your discipline (and your place of study). You will participate in the host university's "normal" curriculum. You will also receive the benefit of special seminars. An eight-week practical phase (e.g. at a company) is included. The host university is to arrange accommodations. A seminar will prepare you for your stay abroad. Language training will be provided before and during the stay, and monthly support amounting to DM 300.00 will be awarded (in addition to BAföG, where applicable).

Dual Degree: The foreign portion of the Group Programme described above is to make up about half of your overall period of study. In addition to a German degree, you will also receive the corresponding foreign degree (e.g. Bachelor's, Master's) for your given field of study.

Foreign Aid Project: You are to have the opportunity for "hands-on" application of the professional know-how gained in your studies during an 8-12-week foreign aid project. You are to contribute supportive work, e.g. for the construction of an irrigation system, in setting up health and social advisory services, in the use of computers for an agricultural project, etc. The limited economic and technical resources of the recipient country call for an appropriately adapted approach, for which you will be prepared.

European Integration Unit: For students of all disciplines, a course consisting of seminars and lectures will be offered as an introduction to the tasks faced by European institutions, as well as to Community law. Foreign experts on business/economics, social science and law will exemplarily present the changes (and problems) which are most significantly affecting their countries as a result of Europe. The course is also particularly addressed to foreign students. The course is to be taught in English. Would you participate?

...and what if the course were held in German?

Parallel Seminar: At your place of study, a one-semester "Research Seminar" will be held on a topic which interests you. The findings, and especially the methodological approach, are to be documented in English. Parallel to this, the same seminar is to be held at various European institutions of higher education. After completion of the reports, five to six interested participants from each participating country are to discuss the findings at a "conference" in Brussels. At the end of the semester, the report from this conference is to be used as a basis for presenting the findings of the research done, as well as the different approaches taken by the other European participants, in the seminar. ...and at the conference, as well?

Virtual Seminar: On a topic which interests you, a "virtual seminar" is being offered for students and educators from around the world. Communication between students and instructors is to be in English, via the "information highway" (Internet, mailing lists). Seminar papers, discussion contributions, ideas, questions, etc. are to be made available to all seminar members in the form of computer files. You will be called upon to comment on or reply to contributions by others. Internet skills will be learned in the seminar. Regular study credit will be awarded for the seminar.

...or would you have preferred to have chosen a completely different "international" curriculum right from the start? For example **European Studies:** You will qualify yourself as an expert on European issues (with an appropriate degree) by acquiring wide-ranging, interdisciplinary knowledge (on European law, economics, geography, culture, etc.)

University”, and “Virtual Seminar” serve as curricular supplements. They are intended to “bring home” the European or international dimension in the sheltered setting of the domestic university. The primary thrust of the “Virtual Seminar” is to internationalize the learning experience by exploiting the potential of new information and telecommunication technologies.

Those models involving international contacts without cross-border mobility can easily be transformed into models with (some) foreign mobility (“International Classroom Abroad”, “Foreign Aid Project”, “Group Programme”, “Dual Degree”, “European Studies”). These extended models can be said to constitute transitional paths towards conventional foreign study.

Great Acceptance of Special Offerings

Student acceptance is greatest in the case of lectures by foreign professors. Language courses also enjoy great preference. The acceptance of certain models involving foreign mobility is similarly high (especially the “Group Programme”). Very few students, however, are intrigued by “European Studies” or activities striving to achieve a more enlightened citizenry, such as “European Integration” (see Fig. 17).

On the whole, one can say that students are highly receptive towards internationalized curricular offerings. Three quarters are quite certain that they would have participated in at least one model. Almost all students (98%) would have been “quite likely” to participate in at least one model. The number of those with an inherently skeptical or negative attitude towards internationalized study is exceedingly small, at 2%.

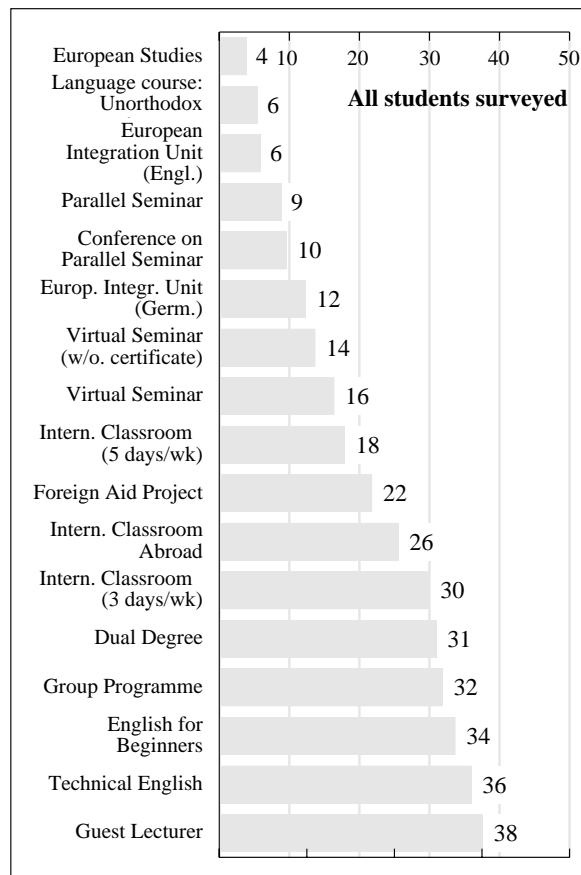
Despite the fact that students of humanistic and social disciplines are the ones who are most receptive to the various forms of curricular internationalization, acceptance by students of engineering and the natural sciences is also encouragingly high (Fig. 18).

Virtual Mobility Not a Substitute for, but Rather a Transitional Path to, Actual Mobility

Also considering that – unlike the case with conventional foreign study – biographical factors such as gender, age, financial and social background are found to have little bearing on the de-

Fig. 17 Degree of Acceptance for Models of Internationalized Study

Students who “definitely” would (or would have) take(n) part; in %



Internationalization of Study

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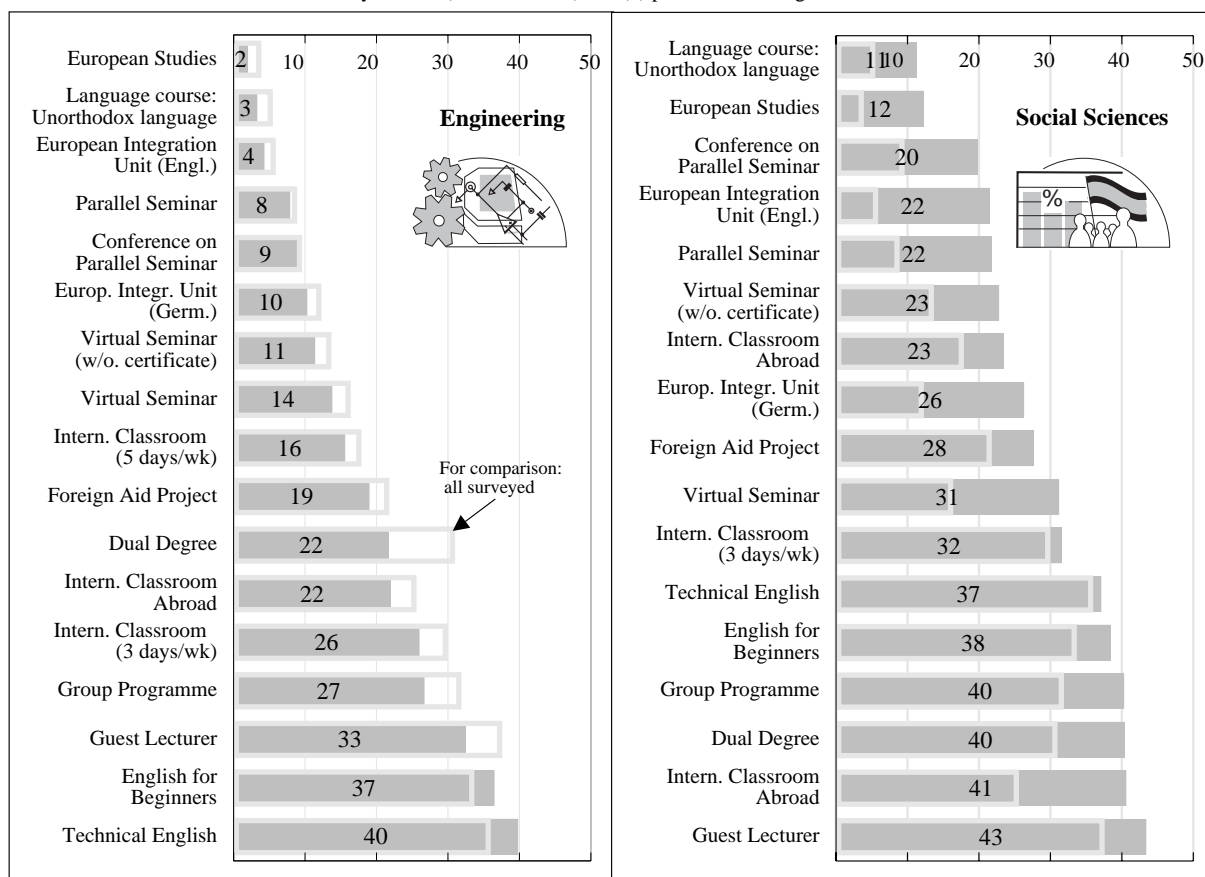
gree of acceptance afforded these models, it becomes apparent that the more accepted models constitute effective trailblazers for the enrichment of study with international experiences. The fact that models involving limited foreign mobility are among the more preferred choices indicates that students are not so much seeking a substitute for, but rather a sheltered transitional path to, actual foreign mobility. In this sense, the preferred models also serve as an important “stepping stone” to actual mobility, either while studying or in subsequent vocational life.

Dovetailing Choices and Disciplines

The trailblazing role of these models for internationalized study is underlined by the way in which the various modes of international experience are accepted to varying degrees in close correlation with students’ personality make-up. Models involving greater foreign mobility are

Fig. 18 Degree of Acceptance for Models of Internationalized Study by Discipline

Students who "definitely" would (or would have) take(n) part, in % of the given students



Internationalization of Study

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chosen much more often by dynamic students than by their less dynamic counterparts. Conversely, more sheltered approaches to internationalization, such as the models “Guest Lecturer”, “Virtual Seminar” and “Parallel Seminar in Germany” are accepted relatively frequently by introverted students, too. The correlation between student personality and rates of acceptance for the various types of choices provides a viable line of attack for educational policy measures (see Fig. 19).

Owing to the clear differences among the disciplines in terms of their students’ dynamic propensity, specific offerings can be chosen to match the dominant mind-set in a given field of study. By way of example, a “Virtual Seminar” is bound to be better received by largely introverted students of computer science than would a programme with a stronger slant on mobility. The study’s field-specific findings show the way to curricular packages which are bound to be accepted, too.

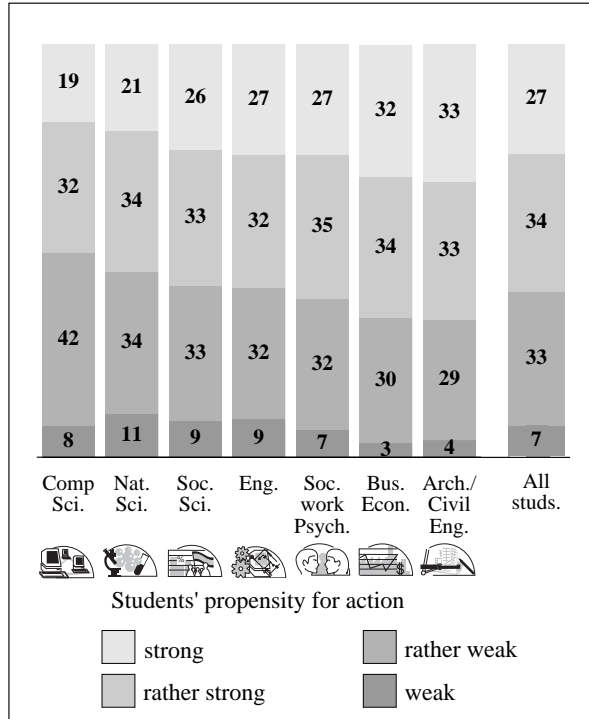
Good English Skills also Prerequisite for “Virtual Mobility”

Beyond personality structures, two other factors need consideration: political mind-set and foreign language ability.

Even among students, a minority fearing a connection between internationalization and excessive “estrangement” is on the rise. A more reserved stance toward internationalization may be anticipated in the case of a tenth of all students. This minority looks upon models for internationalizing study with disapproval.

A further barrier exists in the form of inadequate foreign language skills. In view of the previously established mediocrity of these skills, this ought to constitute the largest impediment to a far-reaching internationalization of curricula. Across all models, good abilities in foreign language – and especially in English – were found to greatly

Fig. 19 The Personality Dimension: Propensity for Action by Discipline in %



Internationalization of Study PTS 1996

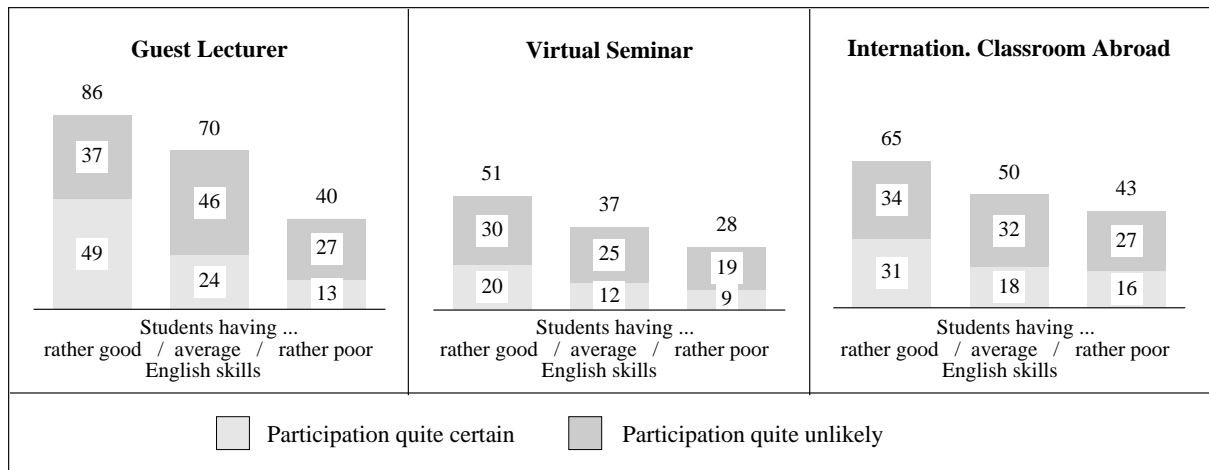
increase students' openness towards internationalized study. This connection not only applies to opportunities involving direct contact with foreigners, but also to models lacking mobility aspects, such as the "Virtual Seminar". The use of

new information technologies also requires communication skills, at least in English. The "Virtual Seminar" was thus much better received by students with good skills in English than by those with poor English skills. Precisely this correlation also goes to explain the above-average acceptance of extracurricular language courses on the part of students of engineering and the natural sciences (Fig. 20).

Since students do not seem to be grasping the necessity of foreign language skills until they are already studying – at which time students of technical and scientific disciplines undergo a motivational "flip-flop" regarding the issue of foreign language proficiency – the existing foreign language deficits cannot be eliminated by the school system, alone, but rather require remedial efforts on the part of higher education, too.

With English being the standard language of communication and considering the amount of catching up which needs to be done in elementary English skills, it becomes clear how far we are from the ideal of the polyglot European citizen. The objective "proficiency in more and more Community languages" as foreseen by European educational policy not only seems to lie in the distant future, but to be ultimately unrealistic, even if only in cognizance of the conspicuous role played by English in the vigorous growth of the Internet.

Fig. 20 Acceptance for Selected Models Depending on Students' English Skills
in % of students having rather good, average or rather poor English skills



Participation quite certain
 Participation quite unlikely

Recommendations

- *The preferred models of curricular internationalization are, in descending order: “Guest Lecturer”, “Language Course: Technical English”, “English for Beginners”, “Group Programme”, “Dual Degree”, “International Classroom”. In applying for SOKRATES support or when promoting models, these should be given priority.*
- *Especially in the as yet not very internationalized contexts of engineering and the natural sciences, more courses for elementary and technical English should be offered. Additionally, preferential treatment should be given to promoting the models “Guest Lecturer”, “Group Programme” and “International Classroom” in order to effectuate a greater openness for international concerns.*
- *Restraint should be exercised with offerings seeking to convey the European dimension via “general study” or by means of discreet, interdisciplinary curricula. In the case of so-called European curricula, student receptivity, vocational capability and job-market opportunities require closer analysis.*
- *Students need to be made more aware of the educational and experiential possibilities of virtual seminars. However, a more widespread use of new telecommunications technologies in an international context also involves the need for technological support measures.*
- *Instruction in less widespread foreign languages should be interregionally organized.*