

Teaching and Learning—students and university teachers

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My topic, 'teaching and learning', does not have a structure as its central theme but an *interaction*, and in fact interaction not among organisations or organisational units but among persons. Although gathered together in separate groups, each with its main activity of teaching or learning, such persons are at the same time *individuals*, all with their own characteristics.

The way in which this multifaceted reality eluded all attempts to bring it under control, and threw up new problems, reminded me of the nine-headed Hydra from the labours of Hercules who grew two new heads for every one that was cut off. Research on this topic seems Hydra-like to any one attempting to put it into some kind of order.

The ways in which this area is viewed by different disciplines and sub-disciplines are many, just like the heads of the Hydra. Students are observed and examined as *social* beings by sub-disciplines of sociology and political science: educational sociology, youth sociology, cultural sociology and sociology of the university all take an interest in these groups, which are quantitatively but above all qualitatively important to our societies. Insofar as students themselves serve as this focal point (i.e. not seen as just one group among many or *exempli gratia*), they should be differentiated according to their major aspects (cf. Huber & Vogel, 1984, pp. 108 ff.).

(i) University socialisation research follows students in a temporal perspective, and as a life-long process, in which personality develops as a socially active agent coming to terms with the social environment (cf. Geulen, 1973, p. 87). It examines that aspect accompanying study at a university and asks about dispositions already present, simultaneous environmental experiences and subsequent changes as elements of this process of development and its explanation [1].

(ii) Student research takes a spatial perspective, but first describes the student body at a particular point in time: characteristics of social recruiting, study careers, knowledge, ways of living, relationships and study strategies (Huber & Vogel, 1985; Schneider, 1985).

(iii) University teachers as subjects of social research, and in addition as representatives of an old and important profession, are of interest to sociology of the professions, in particular to the theory of professionalisation; as members of the scientific community, they are studied by the sociology of science (Huber & Portele, 1983; Braxton, 1986).

Insofar as teachers are the focal point of such research, it should be possible to differentiate in the same way between university teacher research or sociology and research into the socialisation of university teaching. A large number of studies have been made on the former (cf. Bochow & Joas, 1984, for Germany; Neave, 1983, for

Europe; Ladd & Lipset, 1975 for the USA). For the latter, however, this attempt at systemisation throws up a preliminary desideratum: that is, even published studies with titles like "Scientific Socialisation" (my own included) at best analyse attitudes or specific personal stages in the development of university teachers (cf. Portele, 1981, in particular) and the social forces affecting them. They have failed to open up the temporal perspectives required by the development of the personality of the university teacher over time, far less pursued them. Yet, this could be significant for issues concerning university didactics, e.g. the development of self-assessment, research and/or teaching orientation.

Like all learning, *student learning* is also part of the *theory of learning* or in a further sense of the psychology of teaching, which in this connection also deals with the problem of the diagnosis and the prognosis of learning and achievement (e.g. in entrance or other examinations). Indeed, learning research, insofar as it dealt with humans at all and not with animals, has frequently used students as the objects of observation, no doubt because of their easy accessibility in Departments of Psychology. Until recently—I will come back to this point later—comment was not made on specific student learning processes, prerequisites or procedures, but on learning generally (cf. Fincher, 1985; Hounsell, 1983, for (incomplete) surveys).

Didactics, a branch of the *science of education*, enters the scene along with the perspectives on *teaching*. It deals with methods and reasons for decisions regarding goals, contents, transfer forms (methods and media), testing methods (measurement of achievement and evaluation), on the action levels of curricula and partial curricula (study courses and sequences), teaching series and units (classes), and individual learning situations. Insofar as it is empirically based, didactics includes the methods and results of the sociology and socialisation student and university teacher research, the psychology of teaching and instructional research, more or less as its auxiliaries. Insofar as it functions normatively, it reverts to the philosophy of education (especially the theory of education and the institutions of education, in this case university or college) (cf. Chickering *et al.*, 1981; Wildt, 1984).

The process of interaction itself, the meeting of students and university teachers in teaching and learning both in class and also in counselling, supervision and examination, ultimately raises as many potential issues, and consequently disciplines, as the aspects it presents in its complexity: group dynamics and communication for socialpsychology and linguistics or communication theory, instructional models, media and methods with their effects on didactics and instructional or learning research. In a wider field of reference; it involves scientific research (e.g. paradigms) and organisational sociology (e.g. structures of hierarchy and decision), personal participation as input and effects as output, for socialisation research. The heads of the Hydra, chopped off and packed into the various disciplines, multiply as the analysis of learning situations and socialisation interactions progresses.

This first glance at the field shows I cannot possibly offer a uniform inspection and summary of all the relevant directions of research. Each would require—and to some extent has—complete encyclopedias, weighty books or works in several volumes, in any case extensive reviews. I fear I will not be able to cut off all the heads of this Hydra at once, so I shall start with one and see what happens.

What do Students Learn?

What do students *actually* learn...? Or, to ask in the words of the article by H. S.

Becker (1972), which is still the standard work in this field: "What do they *really* learn at college?" These adverbs are doubtless added because of the suspicion that the obvious answer—that they acquire knowledge in one speciality or another—is not the whole truth. They point further afield beyond international teaching and learning to socialisation and personality development, to hidden curricula and survival strategies. This leads directly to the next question: how do students see and experience university and studies—in themselves and in relation to the other worlds (of family, friends, jobs, politics, and culture), in which they obviously live at the same time? What goals do they have? What importance do they give to their official main activity—studying—compared with other activities in terms of time, interest and energy? Are these busy adults *students* at all any more? Do students exist and, if so, who are they? Do they develop special strategies to cope with learning assignments, study plans, examination demands, the administrative machinery? What strategies? What do their peers or their fellow students mean to them (possibly both terms have long been inapplicable)? Most important, what do university teachers (apart from their functions in lecturing on 'material' or leading discussions) mean to them with regard to their learning and their development? How do they co-ordinate all the various, contradictory impulses, tasks and experiences (or don't they, and don't they need to)?

General Criteria of Research

A Multiplicity of Investigations

Failure to answer these questions cannot, as the first approach shows, be due to a lack of student investigations. Rather, even without counting, these are obviously among the most frequently investigated groups, if research on student and university socialisation is included as well as on learning and development. They are surpassed only by enquiries into drug addicts, or in recent years, into women. In the long term, they are certainly much more frequently 'researched' than university teachers or workers (for West Germany alone, Schneider (1985, pp. 232ff.) notes 283 empirical investigations from 1958 to 1983)). The reasons for this give cause for thought.

First, there is a pragmatic reason. Students are easily accessible, whether as test subjects for the laboratory of the psychology of learning, as partners for long, intensive interviews, as addressees for written questionnaires and as numbers for statistics. Students are relatively understanding and willing partners, as long as they do not refuse on political or moral grounds.

This pragmatic reason is supported by the claim that a not insignificant portion of studies published come from diploma papers and dissertations on the one hand (thus Schneider, 1985, p. 1, but see also p. 156), from the work of planning staff, advisory offices, *ad hoc* investigation groups or Offices for Institutional Research (or the like) of individual universities on the other. This literature appears to be an amorphous mass of innumerable individual studies trying to come to grips with summaries of summaries. Between these extremes, major research projects of national scope and duration are very rare.

Another reason may lie in the *social* position of the student body. Students are, despite poorer job prospects, future members of the ruling class (even though within limits; cf. Bourdieu 1976a, 1982, 1984). Recruitment and socialisation modify their future behaviour. They are the sons and daughters of the researchers, of their employers. They are fellow students of the candidates for diplomas or doctorates. Their training is expensive and for that reason alone requires investigation and, if

necessary, improvement. So along with their other privileges comes the special attention of the researchers (if that can be called a privilege). Furthermore, because of their (often demonstrated) political volatility, students are frequently the object of special attention and concern in the field of *politics*. One may assess what problems a society is having with its students from the evolution of the topics under investigation. In the USA, for example, the standard topic was the changing success of competing universities in all dimensions of education. In the 1950s and 1960s, it focused on the threat to and strengthening of liberal values, then forms and causes of campus unrest, then moved to racism. Now, for some years, illiteracy and other inadequacies in educational standards and student success as well as student 'consumerism' have taken centre stage. In France, student protest movements, social inequality and self-perpetuation of the class structure by means of entry to the various types of university and subjects have been paramount. In East Germany and the Soviet Union, willingness to work, independence, professional motivation of the students are major concerns (cf. Koslow & Starke, 1985). In the Federal Republic right from the start, the democratic attitudes of students, the motives for protest, the support of violence and terrorism, then conversely their passivity, their tendencies to 'alternative' lifestyles and opting out have drawn interest (cf. the review by Schneider, 1985). Finally, students incapable of studying at the beginning and too old at the end of their courses because studies take too long are matters for concern (cf. most recently *Studienzeiten*, 1988). Neither the social studies of the German Students Welfare Organisation (cf. Isserstedt *et al.*, 1986), which have been regularly repeated, nor the data on motives and tendencies from Constance indicate a change in focal issues (cf. Bargel *et al.*, 1984a; Peisert *et al.*, 1988).

Weaknesses in Definitions of Comparison

Research in this field remains mostly within the confines of the national university system, or even within the region, local institutions, indeed departments. Comparative investigations are extremely rare. Among about 400 abstracts for 1987 on *Research into Higher Education Abstracts*, only 15 comparative studies are to be found [2]. There are studies comparing *single* factors on an international basis. This is understandably most successful when comparison is to be made only quantitatively—student numbers, participation in education according to region and social status, length of study time and success ratios, career prospects and job search, relations between students and university teachers, etc. This approach does bring out the differences, e.g. in 'student flows' (cf., for example, Hecquet *et al.*, 1976; Cerych, 1983; and the biennial reviews in the *European Journal of Education*, most recently Vol. 23, Nos. 1–2), or in conditions of study (cf. *ibid.* Vol. 19, No. 3), even if they cannot be comprehensively explained. Very few investigations deal with the qualitative dimension. One outstanding example is the FORM project. Questions on study motivation, political and social attitudes, feelings of personal identity and moral judgements were put in the same way to students from five different countries and their answers compared (cf. Framhein & Langer, 1984). Yet, it is not possible to check whether the questions meant the same things to the students or have the same connotations across their respective cultures.

Systematic comparison requires a single theory of the university that covers all factors or at least a concept of the structure of university systems which would permit the identification of common tasks and the functional equivalents of their outcome

without unreasonably diminishing national, historical and cultural characteristics (cf. Oehler, 1986, p. 19).

There are few works relevant to our topic that give rise to such comparisons. The most important German ones are from the Bavarian State Institute (Gellert, 1983 on England; Ewert & Lullies, 1984 on France). In the most recent of them, on Italy, Berning and co-authors (1988) explain the context of the apparently unregulated study in Italy, a phenomenon that tends to be displayed elsewhere.

The Student Body, Role of Students and Subsequent Changes

The concerns of different societies can be seen from the changing topics of research on students. Beneath them, however, lies a solid base of more durable topics, such as:

- university entrance, choice of university and composition of the student body;
- decision to study and choice of subject;
- planning of studies, study goals and ideas on career and professional prospects;
- study approach, strategies, techniques, work load;
- study process: length of study, success, abandonment and change of subject;
- perception and criticism of the university, study satisfaction, attitudes to university and teaching staff;
- social and material situation: family status, residence, financing of study, employment;
- mental/emotional situation and personal problems;
- attitudes towards politics and society.

I shall attempt to draw together the outlines sketched by student research in the Federal Republic of Germany. That such an attempt can be considered derives from the thorough yet clear summaries of the latest studies from the three main centres of university research: Hanover (HIS-Ergebnisspiegel, 1987; for the latest (11th) social survey, see Isserstedt *et al.*, 1986), Kassel (Teichler, 1987) and Constance (Peisert *et al.*, 1988), and from earlier retrospective reports and synopses by Griesbach *et al.* (1983), Huber & Vogel (1985) and above all Schneider (1985). Schneider separated wheat from chaff in a detailed criticism which included empirical and statistical methods. He selected 74 investigations for further analysis, from a total of 276 recorded from the years 1958 to 1983, according to the criteria of these methods and categories (quantitatively set up polls of students, with reference more or less to these topics). Despite the variety of topics, he screened them for general validity and for their consistency or development (pp. 188ff.).

Assessment of Results

The *social composition* of the student body in all universities has changed since the 1960s in favour of children of workers and especially white collar workers (but the participation of these social groups in university education has increased only minimally: cf. Isserstedt *et al.*, 1986, pp. 101ff.), yet their proportion stagnated in the 1980s at 16% and 39% respectively. Forty per cent of students are women. Around 60% of the students at a university on the average come from that town or from the surrounding district (Peisert *et al.*, 1988; Framhein, 1983). Generally, students choose to study at the university closest to home, for financial and social reasons cf. Schneider, 1985, p. 194) (only 6% do not get their first choice).

The academic route to university leads in nine cases out of ten via the sixth form of a grammar, technical or comprehensive school. In the last decade the same route has become much more common for entrance to technical college (now for over 40%), despite a much wider range of entrance possibilities. Many students (a quarter of those at university, half of those at Fachhochschulen) make another stop on the way (cf. Peisert *et al.*, 1988, p. 28) before or after graduating from high school. Thus, first-semester students are older than the textbook diagrams on the structure of the German educational system show (university over 21, Fachhochschulen over 22 years old).

The decision *to go to university*, which in the 1980s has been rather less a matter of course among sixth formers, is determined above all by the desire to have a wide choice of occupations especially by those combining vocational training and study. It is less due to an interest in the specific field of knowledge or work in particular professions. Rather, it stems from an interest in either practical activity (those combining study and work) or in academic work as such and in independence later or the freedom to organise their professional life as they wish. Yet students talk much less about security in their future profession, chances of a good income, higher status, or top positions (HIS-Ergebnisspiegel, 1987, pp. 42ff.). Twenty years earlier, perhaps because of more dynamic growth in the economy, greater aspiration for social betterment, to maintain academic status, to follow family tradition or profession were important considerations (cf. Schneider, 1985, p. 195).

When questioned about reasons for their choice of subject (20% of students at universities change at least once), the consistent answer of the overwhelming majority, irrespective of time and place, is that they are influenced by their own interests and abilities in a particular discipline or activity, aspirations to higher or even more secure professional status or better positions; incomes are less significant (cf. Bargel *et al.*, 1984a, pp. 76ff.; Peisert *et al.*, 1988, pp. 105 ff.) [3].

It is quite easy to follow the *processes* of gradual decision-making. The better their grades, the more certain is the decision to study (on the average 50%, at the top 70% of the students, cf. Peisert *et al.*, 1988, p. 91). Having completed a *general* upper secondary course of studies, and contrary to the fears of the opponents of the new secondary stage of education (*gymnasialen Oberstufe*), less than 10% of high school graduates move to a field of studies unrelated to their high school majors. Most continue major subjects at high school or keep up one of the two subjects (*ibid.* p. 82). If they take vocational training *after* graduating from high school, then this is usually included in the subject studied later. In retrospect, 70% would still choose to study the same subject, especially if job prospects seem promising (cf. *ibid.* pp. 31,33).

In the areas in which the students are not already rather strictly regulated (technical college courses, medicine), there is little indication of any study *planning* worthy of that name, i.e. across several semesters at least. Preliminary information given to the students appears to be scanty and haphazard, their *orientation problems* at the start of their studies considerable, their own attempts to inform themselves poor or limited to the most basic information and the most easily accessible sources (cf. Framhein *et al.*, 1981; Bargel *et al.*, 1984a, pp. 102 ff., 117ff.; Teichler *et al.*, 1987, pp. 157 ff.).

First-semester students seem to have a 'realistic' idea of the probable *length of their studies*, which far exceeds the official norms for length of study. It is closer to the maximum time allowed by the BAFÖG (Federal Law on Support for Education and Training) and thus closer to the actual average length of studies, which is continuing to increase (cf. Peisert *et al.*, 1988, pp. 141 ff.; Studienzeiten, 1988, pp. 85 ff., 139 ff.).

According to surveys carried out in the last ten years, students have vague notions of their future occupations of careers at the start of their studies (cf. Schneider, 1985, p. 199). As their studies progress, their confidence increases. Yet at present, given the difficulties on the graduate job market, this is much less than before: only a third know what they want, another third are very worried by uncertain job prospects (cf. Peisert *et al.*, 1988, pp. 229 ff.; Krüger *et al.*, 1986, pp. 68–69, 122 ff., 157 ff.). This is hardly conducive to an early completion of studies and prompts a considerable number of students (somewhere between 10% and 15%) to continue some form of studies after their initial degree, whether for a second degree, a supplementary course, a doctorate or merely *pro forma*.

I could continue in this vein on the similarity of results in the other topics on the list above. This would show that the majority of students study no more (except during periods before exams) nor less than other workers with a 40-hour week. On average, they take two or three semesters longer than the norm (*viz.* 12.5 semesters for university degrees), and stay somewhat longer at university, sometimes as a result of changing their subjects or because of supplementary courses. They are critical of the university environment, the courses offered and of university teachers; they constantly find fault with the excessive emphasis on specialised factual knowledge in teaching and examinations, and complain just as regularly about the lack of opportunities for private study, participation in research or practical experience. They regard university teachers essentially as specialists, to whom only about a quarter of them speak frequently or with whom they have other contact.

As regards their social situation (cf. the social surveys of the German Student Union, most recently Isserstedt, 1986), they are seldom well-off. Approximately a third (it used to be more) receive BAFÖG loans; at least 50% have some kind of job more or less on a regular basis alongside their studies and depend on this income at least in part. Sixty per cent have a steady partner, 40 per cent live alone in an apartment, more would like to. True, almost all students experience some kind of mental/emotional difficulties (cf. also Krüger *et al.*, 1986, pp. 344 ff.), but—depending on the survey method—the majority believe themselves capable of solving their difficulties (only 5% make use of professional assistance or therapy, a further 8% consider they need to).

What about political attitudes? The majority are politically more aware and better informed, as well as more active and further to the Left, than the man in the street. They are steady in their support of democracy and their rejection of violence (cf. Framhein *et al.*, 1981; Peisert *et al.*, 1988, pp. 242 ff.).

In all this two conflicting circles become evident—and strangely enough these are observed in East German investigations as well (cf. Starke, 1980, pp. 80 ff., 122 ff.). We find on the one hand greater certainty in their wishes, decision-making *and* prospects regarding their profession, more participation in study *and* in extra-curricular activities, greater capacity for work, more contacts, greater satisfaction in their studies (cf. Peisert *et al.*, 1988, pp. 168 ff.; Teichler *et al.*, 1987, p. 294). Yet we also find a great deal of uncertainty in the choice and prospects of their career, greater vacillation between occasional absorption in interesting topics and ‘thoughts of flight’ (dropping out or changing subjects), passivity (outside the university as well), personal and social stress, little satisfaction in their studies (cf. Krüger *et al.*, 1982, 1986). The question as to which is cause and which effect can be pursued *ad infinitum*.

Assessment Problems

These survey results contain little that is exciting or stimulating for the Federal Republic—and possibly the findings would not be very different *mutatis mutandis* for the rest of Europe or even the USA. The political world can sleep peacefully in view of the solid democratic attitude of the student body as a whole, even though there was a special survey section on potentially irritating tendencies such as the ‘alternative group’ (as in Peisert *et al.*, 1988, pp. 284 ff.). Alternative groups proved to be merely interesting or different, but neither dangerous nor costly variants. Legislators who work with and for the concept of a ‘two-thirds society’ need not be alarmed either by the social and mental/emotional problems of students as they arise here and there. Even the financial authorities, if they kept their heads, could disregard problems to the extended study time, if they compared the trifling costs and burdens caused by students who study for years and the much greater ones caused by unemployment. Universities and university teachers for their part face widespread criticism of the courses, teaching methods and the lack of personal contact and help. But they can console themselves with the thought that nothing has changed for at least 30 years. The universities have not collapsed and the number of students has not stopped growing. Only incorrigible squabblers (radical liberals, ‘Greens’, trade unionists, and left-wing social democrats) will dwell on the clearly recognisable social inequality of access and success, on study conditions and stresses that remain. Only teachers (in unrepentant departments of education and university reformers) continue to sympathise with student criticism of the reality of the university environment and demand improvements.

That such an unexciting, generally conformist, even affirmative picture of the German student body has emerged is hardly the fault of the surveys. Despite the tendency of investigations to generalise, they contain many differences in detail which ought to give pause for reflection.

Essential Differences

In fact, these summaries are only a fraction of all of student research. Considerable differences exist in respect of sex, origin, social situation of the subjects. Thus the concept of ‘the’ students is both adhered to and continually undermined or even proved ridiculous.

As regards social differentiation and role dissolution there are fewer men than women from the lower social classes; they are much less evenly spread across the subject areas and face worse job prospects. Although they have the same aims, their plans for promotion more seldom mature. The climate of their university environment is harder towards women (cf. a recent study by Peisert *et al.*, 1988, p. 150; as introduction to a rapidly growing body of literature: Clemens *et al.*, 1986). Children of manual workers, especially of unskilled workers, suffer more from the negative aspects and the individual characteristics of the university—abstract language, lack of communication, shortcomings on the practical side, and a lack of reference to society (cf. Funke, 1986; further literature Preisser, 1982).

Students no longer fit the classic picture of the young bachelor in his garret: in age at the start of their studies (well over 19) and at the end (a quarter of all students are already 25 or older); in family status (marriage, partnerships equivalent to marriage, children), a feature that is even more marked in East Germany (cf. Starke, 1980); in having their own flats far from the campus; and above all in being more or less

gainfully employed, which can be seen as the unofficial German parallel to the part-time student in English-speaking countries and in Sweden (cf. *European Journal of Education*, Vol. 19, No. 3).

Obviously, students bring to their studies markedly different experience in occupation and in life, stress on studying and study strategies in terms of time and content, experiences to which German universities are poorly adapted, in organisation or in teaching methods. At the same time, even if learning (studying) and trying out lifestyles remains the *differentia specifica* or the 'basic role', student activities are becoming more diverse and studying is much less central. Students are living in several worlds at the same time and do a great deal outside the universities (cf. Huber 1985, 1988). An increasingly large group of older students (studying for second degrees, perhaps in permanent employment, with family and flat of their own) presents a completely different picture (cf. Schober, 1981, esp. pp. 201 ff.).

Another area where essential differences may be sought concerns the process of individual development, the changing attitudes and strategies and the underlying predispositions, which are really topics for university socialisation research. The very variety causes problems for student research when it tries to take a snapshot of conditions at a particular moment. The possible combinations of objective and subjective characteristics feed such a broad variety of individual dispositions and conduct that generalisations about students appear rather meaningless.

The solution that many engaged in student and socialisation research adopt *vis-à-vis* individual variety is that of *type forming*. The first attempt at forming student types and allocating them to those under observation is a long, sometimes amusing story and has the most colourful, sometimes macabre manifestations. Depending upon how they are constructed, typologies may be empirical (preferably established by analysing factors, with or without theoretical plausibility tests), intuitive (supported by observations), theoretically deduced or normative; very often they are mixtures of these categories. They can be constructed according to social origin, schooling or situation (e.g. students of the 'alternative path' to higher education or 'living with parents' or 'mature student', cf. Schnitzer *et al.*, 1983, for example), to study strategies and study achievements (e.g. "Mini-Humboldt" versus "Swot"; cf. Keil & Piontkowski, 1973) or, very frequently, according to dominant orientation (e.g. careerism versus intellectualism) or psycho-social dispositions.

Some alternative types are listed below [4]:

- (i) Empirically generated, analysis of factors and clusters, related to orientation (concept of studies), e.g. the four types of the Kassel graduate study (Teichler *et al.*, 1987, p. 152); "adjusted—average—energy optimiser—dynamic—innovative".
- (ii) Empirically generated (analysis of factors), also related to orientation (motivation), e.g. the five types of the latest survey of Austrian first semester students by Kellermann (1987, p. 119): "status seeker—generalist—nothing-better-to-do student—top pupil—part-time student".
- (iii) Empirically generated, related to efficiency and readiness to work, e.g. the East German student investigations (cf. Koslow & Starke, 1985, pp. 127 ff.) grouped in levels of intensity.
- (iv) Empirically generated (by analysis of factors), related to particular socio-political attitudes (to 'alternative values'), e.g. the four types in Peisert *et al.* (1988, pp. 287–8): "conventional (two levels)—ambivalent—extrovert—alternative (again two levels)".

(v) Empirically generated and constructed in a four field matrix, e.g. the four types (with large zones of overlap acknowledged) in the Stanford student survey by Katchadourian & Boll, 1985, pp. 28 ff.: “intellectuals—strivers—careerists—unconnected”.

(vi) Theoretically deduced from deliberations not unlike those of Clark & Trow (1966), a source of many typologies, and related to orientations and at the same time environmental levels or sub-cultures, e.g. the four types in Portele & Huber (1983, p. 108): “science oriented—education and profession oriented—examination oriented—sub-culture oriented”, each of which can be followed for itself or for wider goals.

These few examples from among many may serve to indicate that the list could be continued indefinitely and that the number of typologies could grow *pari passu* with the number of authors who construct them. Obviously, as indicated earlier, each individual dimension of subjective characteristics can be used as a focus for a typology. This can also be a strategically useful means of structuring or stressing a presentation, like the differentiation “subject expert—socially dextrous—diligent detail worker”, with which Morsch *et al.* (1974) drew attention to the fact that the excessive structural demands in engineering courses must necessarily elicit study strategies, which are certainly useful to cope with the system, but which contradict education policies and academic aims or criteria. Another public image (that, too, is type forming!) can be demolished with its own weapons, viz. by showing what other characteristics can be combined with those mentioned above: e.g. with regard to “alternative types”, Peisert *et al.* (1988) manage to refute the currently popular stereotype. It can be heuristically productive in the end to search various contexts for explanations for the irregular occurrence of types, as was done in the Kassel study on graduates.

The evaluating undertone that is almost always present cannot be ignored and is most clearly seen in Kellermann's present penultimate type (1986, pp. 96 ff.): “student scholar—professional student—butterfly—‘step’ student—status seeker—competence seeker”. This evaluation has, of course, an honourable tradition, harking back to probably the most influential typology, namely Schiller's distinction between the breadwinning scholar and the philosophical brain; but at the same time, it shows that the commentaries almost always come from the perspective of the guardians of tradition, the academics, who give prominence to the true adepts of their craft in contrast to those not chosen.

Thus typologies are heuristic means for attaining individually limited goals; as soon one attempts to divide real students into such groups, one meets with the greatest difficulties methodologically and with outraged protest from the students themselves. Both draw attention to the fact that individuals refuse to be grouped according to a single characteristic or a range of characteristics, even theoretically for the sake of order, and even though it may be as important as their orientation to profession and study. This is because if one considers another set of characteristics which does not correlate (e.g. social and biographical situation), completely different groups would necessarily emerge, besides which one cannot and should not speak or act pedagogically in only one dimension.

The other direction in which the investigations originally conceived in general terms have brought out differences of interest to student research concerns fields of study. The statistical distributions given as an average for the student body are not valid for the individual discipline or groups of disciplines, and indeed often prove to be

their opposites. The student bodies of departments are sometimes more different from one another—on this see the latest investigations by Peisert *et al.* (1988) and Teichler *et al.* (1987)—than the various university types; occasionally, even when compared internationally, they have more in common with the students of other countries from the same department than with those of their own country studying different subjects.

In spite of 'levelling', recurrent differences like this still indicate recruitment according to social background and sex, proportion of older students, material resources or employment of students, stress involved in studies and examinations, time budgeting, but also study orientations and goals, as well as frequency of this or that type, professional prospects, political attitudes, development level of moral judgments, experience of mental/emotional crises, etc. How these various attitudes can be explained, what reciprocal relationships they have with the specialist sections of the university environment, the faculty cultures, is material for socialisation research. Here, however, still as a result of student research, it should be noted that even the first-semester students of the subject areas (more than the types of university) differ consistently in their professional aims (high income or personal satisfaction), study interests (interest in a promising conclusion to their studies or in the subject or in their own development), study strategies (syllabus-bound versus syllabus-free or exam-oriented versus interest-orientated) and political attitudes.

Academic Instruction and Individual Student Learning

This section is possibly even more abstruse than the previous one. Even if we leave aside basic research on the theory of learning, the theory of motivation and social psychology, which only involves students by chance, the mass of research on teaching, learning, or classes with reference to university appears enormous. Much of this, however, involves merely local developments, experiments or battles. Viewed more closely, standard topics appear in this area, too: the prevalent academic form of instruction, the lecture and how to improve it or strengthen other forms in contrast to it (group work, less frequently project work, increasingly laboratory work, correspondence courses). Again and again, the question about improvements in instruction (transmission of subject matter) is raised, above all about experiential learning, encouraging problem-solving abilities, creativity, etc.

New cross-subject problems emerge in opposition to the subject curricula, and with them questions arise about their processing in teaching and learning (so long as they are not pushed aside into graduate or postgraduate studies): women's studies, environmental problems, peace questions, for example, plus recently assessment of the compact of technology. If we use as an aid Bernstein's (1977) definition and pertinent description of *collection code*, where the discipline repeatedly threatens to become immobile, and *integration code*, which potentially allows the opening up to other fields of knowledge, forms of experience and language and their inclusion, then it is not difficult, among all these standard topics, to recognise the steady struggle of the reforming teachers searching for the integration code.

Other current topics are thrown up by political events, especially in the USA and recently in Great Britain: the serious problems in methods of evaluating and controlling the teaching of individuals or of institutions (on appraisal, cf. Elton, 1987, pp. 11 ff.).

Nevertheless, basic problems remain untouched, generating contradictions in and against traditional approaches which again and again, with or without the help of

protesting students, have to be processed and accounted for on the level of the curriculum and courses offered.

Another development of teaching/learning research, however, could transfer all responsibility to the students themselves. Two trends, probably unconsciously and unintentionally, possibly totally independent but aiming at each other, lead in this direction.

In the field of education, attention is being directed to promoting independent learning (cf. Boud, 1981, for example). Here several roads are converging: structural need for correspondence courses (cf. Smith, 1983, for example), technical possibilities of new media and machines (especially the computer) (cf. Prah1, 1986; Berger & Kotzman, 1985, for example), and hopes of being able directly to affect the learners and their methods of learning by indirect (and therefore never quite controllable) influences on the learning process through changing instruction and instructors.

In the field of learning research, Marton and his colleagues in Göteborg have brought about something like a change of paradigm, whereby other aspects have been brought to light, not only in contrast to behaviouristic, but also to cognitive psychology of learning, which is also gaining influence in Europe: the activity (self-steering) of the learner, manifest in learning strategies for coping with typical study assignments, and the relationship of these strategies to the specific contents *and* contexts of learning (cf. Marton *et al.*, 1984; Ramsden, 1985; Hounsell, 1983). The time was obviously ripe for a change of viewpoint like this; in any case, the Göteborg papers stimulated a flood of others, especially on study strategies, including a dispute as to whether it is a question of strategies used according to the situation or styles that have become characteristic of the personality (cf. Wilson, 1981; Entwistle & Ramsden, 1983; Rossum *et al.*, 1985; Newble & Gordon, 1985; Laurillard, 1979). In this field, two tendencies are touched upon: subject differences on the one hand, which Marton pursued in interesting papers on the development of subject-specific concepts of 'history', 'economy', 'market', etc. (cf. Dahlgren, 1978); and individuality on the other, which becomes evident in the choice of specific strategies or the formation of style.

A practical consequence of these developments could be that universities and departments are (again) content to put forward as a course offering everything that is being done anyway in the sciences, in all its colourfulness, carelessness, contradictoriness and incoherence (instead of arguing responsibly about goals, content, learning situations and study structure). Garnished with phrases like "freedom to learn", "autonomous learning" and "learning to learn", the individual would be left to "cope" strategically on his own with all the problems that the institution has given up trying to solve.

Thus the individual's position has grown in value. It would be *theoretically* consistent to examine how he actually manages to complete the tasks left to him—collating observations, planning action and integrating experiences of a heterogenous nature. But there is a long way still to go. The first steps appear to be partly false insofar as abstractions are being made once again from specific contents on the one hand and personality profiles on the other, all for the sake of making statistical statements: e.g. investigations on student planning behaviour, which ask only about the degree or the completion only to find that long-term or even medium-term study planning is usually minimal (cf. Cooper & Fabian, 1987, for example). Similarly with research on distribution and success of learning and study strategies, which immediately classify them into daring type categories and then use them (Entwistle & Ramsden, 1983; Rossum & Schenk, 1984). It would be interesting to know how they

put together the manifold and contradictory pieces of information, signals and appeals to which they are subjected—and if they in fact do. Just consider the complexity of the individual learning situations, whose individual elements (namely goals, contents, forms of transfer and control, organisational context and persons involved) are certainly normative for the teacher of didactics and planner, but in fact only too often each points in a different direction. Remember the (well-investigated) tension between the official setting of aims and the “hidden curriculum” (cf. Oleson & Whittaker, 1968; Snyder, 1971).

This would be the right context to ask what importance university teachers really have for students: as providers of specialist knowledge, as officials in charge of the curriculum and examining system, as personal advisers (here cf. Kiel, 1987, as a gatekeeper on the way to success, as the model of the researcher, the academic, *homo politicus* or *apoliticus*). The total picture once again hides the actual ‘tension’ processes, showing how students sometimes get annoyed with their university teachers, sometimes irritated by them, often suffer under them . . . (cf. Ottersbach *et al.*, 1988), and how they have to cope with the discrepancies between their preaching and their daily behaviour.

Socialisation Research

Here we have moved beyond the normal confines of teaching/learning research and onto the field of socialisation research itself. For it is this very question, at least in the German discussion, that provided the driving force for the work on and with the interactionist concept of identity, identity development and identity crises (cf. Sommerkorn, 1981; Vogel, 1986). In research it is applied to subjective experiences of the university environment (cf. Ottersbach *et al.*, 1988), to development crises (cf. Krüger *et al.*, 1986), to the “course of life and biography” (cf. Buttgerit, 1987, especially the editor’s detailed introduction and the contributions by Hermanns and Heipcke) and to elaboration on the subject concept itself (cf. Liebau, 1987).

In Swedish research there is a similar emphasis on individual development of the reality concepts and sense categories (see the work of Marton and colleagues). It is most obvious in the United States in the differences between the two equally monumental and impressive omnibus volumes on the American college by Sanford (1962) and Chickering *et al.* (1981). The latter, considered as a successor to the former, specifically made personality development and development requirements of different students the focus and the starting point of the analysis [5].

In university socialisation research, too, a shift in emphasis can be observed in favour of individualisation (personality development) over socialisation (society reproduction)—two areas that it should actually be working on together. One might note that where social relationships become more and more abstruse and the ruling structures and class situations more effectively concealed—for the subjects under investigation and for the researchers—the whole interest turns to the subjects, to the question of how they cope with these relationships, how they preserve their personal identity. Here university socialisation research is moving in the same direction as general student research in its perception of the actual differentiation in the student body and the renunciation of generalised statements about ‘the’ students, but also of generalised promotion measures for them. As in teaching/learning research, responsibility is shifting from the didactic shaping of the subject matter to that of the individual learning strategies.

This is not to deny the importance or necessity of this direction of research: the question as to how the subjects process and what they have to process has been posed and cannot be answered other than by having them complete even more detailed questionnaires (cf. Lind, 1981) or (obviously and more usually) by giving them the chance to express themselves in interviews (cf. Vogel, 1986 as an example of this). As a supplement, personal comments made in another context can be analysed: statements in interviews, in television reports (like the excellent series by R. Kahl, "Studieren und kein Land in Sicht?"—Nord-deutsche Rundfunk III, 19–23 June 1987) and above all fiction by and about students have by no means been sufficiently exploited to my mind as sources and as possible material for hermeneutical/critical interpretations. No dogmatic limits to knowledge are to be drawn here: the more individual the biographical case studies, the closer the results of qualitative measures approach the texts of good literature.

There is all the more necessity for frankness towards other similar approaches, hence towards a certain approximation of sociological socialisation research, as not only the claim to simple generalisation *qua* statistical representativeness is relinquished with individual studies of this nature, but through them two naive premises of the abstract reconstruction of personality development have been undermined: that of the unity of the course of life and that of the inner consistency of ideas and feelings as a prerequisite to identity.

I have reached my *ceterum censeo* that the predisposition to a specific speciality must be theoretically investigated and transcended in terms of university didactics. New heads are growing on the Hydra—and I do not dare approach them at this point.

NOTES

- [1] For a survey of more than 1000 studies of the impact of college, see Feldman & Newcomb, 1969/70. The actual follow-up announced by Pascarella seems not to have appeared yet, but see instead Pascarella, 1985a; Weidman, 1989; Huber, 1980; Portele & Huber, 1983.
- [2] Language barriers also make themselves felt in this valuable service: among the 250 journals excerpted in 1987, only seven were in languages other than English (1 Portuguese (Brazil), 3 Spanish (Spain, Mexico, Venezuela), 1 French (Belgium) and 1 German).
- [3] The consistency of these answers is astonishing and worth stressing (cf. Bargel *et al.*, 1984a). It is of course a question whether they were following norms of social desirability or were a consequence of the method of investigation (cf. Schneider, 1985, p. 196; Huber, 1985, p. 34).
- [4] A hint of the older typologies can be found in the survey by Portele & Huber, 1983, pp. 107–108; cf. also Katchardourian & Boll, 1985, pp. 39 ff.; Feldman & Newcomb, 1969, I, pp. 374 ff.
- [5] It is surprising that a survey of the impact-of-college research that is meant to be encyclopaedic (cf. Weidman, 1989) does not discuss this point further, but steadily follows a kind of people-processing model.

REFERENCES

- BARGEL, T. *et al.* (1984) *Studiensituation und studentische Orientierungen* (Studien zu Bildung und Wissenschaft 5) (Bad Honnef, Bock).

- BECKER, H.S. (1972) What do they really learn at college? in: FELDMAN, K.A. (Ed.) *College and Student* (New York, Pergamon), pp. 103–108.
- BERGER, W. & KOTZMANN, E. (1985) Neue Medien in Forschung und Lehre, *Zeitschrift für Hochschuldidaktik*, 9, Sonderheft 11, pp. 109–123.
- BERNING, E. (1988) *Hochschulwesen im Vergleich Italien—Bundesrepublik Deutschland* (Munich, Bayer. Inst. für Hochschulforschung und Hochschulplanung, Monographien NF 20).
- BERNSTEIN, B. (1977) Klassifikation und Rahmung pädagogisch vermittelten Wissens, in his: *Beiträge zu einer Theorie des pädagogischen Prozesses* (Frankfurt, Suhrkamp), pp. 125–161.
- BOCHOW, M. & JOAS, H. (1984) Der Lehrkörper der deutschen Hochschulen, in: GOLDSCHMIDT, D. et al. (Eds) *Forschungsgegenstand Hochschule* (Frankfurt, Campus), pp. 81–106.
- BOUD, D. (Ed.) (1981) *Developing Student Autonomy in Learning* (London, Kogan Page) (2nd edn, 1987).
- BOURDIEU, P. (1976) Le champ scientifique, *Actes de la Recherche en Sciences Sociales*, 2–3, pp. 88–104.
- BOURDIEU, P. (1982) *Die feinen Unterschiede. Kritik der gesellschaftlichen Urteilskraft* (Frankfurt, Suhrkamp).
- BOURDIEU, P. (1984) *Homo academicus* (Paris, Les Editions de Minuit).
- BRAXTON, J.M. (1986) The normative structure of science: social control in the academic profession, in: SMART, J.C. (Ed.) *Higher Education. Handbook of Theory and Research*, Vol. 2 (New York, Agathon), pp. 309–357.
- BUTTGEREIT, M. (Ed.) (1987) *Lebensverlauf und Biographie* (Kassel, Wiss. Zentrum für Berufs- und Hochschulforschung, Werkstattberichte 18).
- CERYCH, L. (1983) International comparisons, appendix to WILLIAMS, G. & BLACKSTONE, T., *Response to Adversity* (Guildford, Society for Research into Higher Education), pp. 133–146.
- CHICKERING, A.W. et al. (1981) *The Modern American College. Responding to the new realities of diverse students and a changing society* (San Francisco, Jossey Bass).
- CLARK, B. & TROW, M. (1966) The organisational context, in: NEWCOMB, T. & WILSON, E. (Eds) *College Peer Groups* (Chicago), pp. 17 ff.
- CLEMENS, B. et al. (Eds) (1986) *Töchter der Alma Mater. Frauen in der Berufs- und Hochschulforschung* (Frankfurt, Campus).
- COOPER, W.W. & FABIAN, C.S. (1987) Long-range course planning by college students, *Higher Education*, 16(1), pp. 95–102.
- DAHLGREN, L.O. (1978) *Effects of University Education on the Conception of Reality* (Göteborg, Reports from the Institute of Education, Univ. of Göteborg, 65).
- ELTON, L. (1987) *Teaching in Higher Education: appraisal and training* (London, Kogan Page).
- ENTWISTLE, N.J. & RAMSDEN, P. (1983) *Understanding Student Learning* (London, Croom Helm).
- EWERT, P. & LULLIES, S. (1984) *Das Hochschulwesen in Frankreich* (Munich, Bayer. Inst. für Hochschulforschung und Hochschulplanung, Monographien NF 12).
- FELDMAN, K.A. & NEWCOMB, T.M. (1969/70) *The Impact of College on Students*, 2 Vols. (San Francisco, Jossey Bass).
- FINCHER, C. (1985) Learning theory and research, in: SMART, J.C. (Ed.) *Higher*

- Education. Handbook of Theory and Research*, Vol. 1 (New York, Agathon), pp. 63–96.
- FRAMHEIN, G. (1983) *Alte und neue Universitäten. Einzugsbereiche und Ortswahl der Studenten, Motive und Verhalten* (Schriftenreihe Hochschule 44) (Bad Honnef, Bock).
- FRAMHEIN, G. et al. (1981) *Studium und Hochschulpolitik. Eine Untersuchung über Informationsverhalten, Studiensituation und gesellschafts-politische Vorstellungen von Studenten* (Schriftenreihe Hochschule 39) (Bonn, Bundesminister für Bildung und Wissenschaft).
- FRAMHEIN, G. & LANGER, J. (Eds) (1984) *Student und Studium im interkulturellen Vergleich. Student Worlds in Europe* (Klagenfurter Beiträge zur bildungs-wiss. Forschung 14) (Klagenfurt, Kärntner Druck- und Verlagsgesellschaft).
- FUNKE, A. (Ed.) (1986) *Hochschulzugang und Probleme beim Studium von Arbeiterkindern* (Düsseldorf, Hans-Böckler-Stiftung o.J.).
- GELLERT, C. (1983) *Vergleich des Studium an englischen und deutschen Universitäten* (Munich, Bayer. Inst. für Hochschulforschung und Hochschulplanung, Monographien NF 3).
- GEULEN, D. (1973) Thesen zur Metatheorie der Sozialisation, in: WALTER, H. (Ed.) *Sozialisationsforschung*, Vol. I (Stuttgart, Frommann-Holzboog), pp. 85–101.
- GRIESBACH, H. et al. (1983) Studenten, Studiensituation und Studienverhalten, in: HUBER, L. (Ed.) *Ausbildung und Sozialisation in der Hochschule* (Stuttgart, Klett-Cotta, Enzyklopädie Erziehungswissenschaft 10), pp. 219–249.
- HECQUET, I. et al. (1976) *Recent Student Flows in Higher Education* (New York, ICED).
- HIS-ERGEBNISSPIEGEL (1987) (Hanover, HIS-GmbH).
- HOUNSELL, D. (1983) Lehr- und Lernforschung im Hochschulbereich, in: HUBER, L. (Ed.) *Ausbildung und Sozialisation in der Hochschule* (Stuttgart, Klett-Cotta, Enzyklopädie Erziehungswissenschaft 10), pp. 355–366.
- HUBER, L. (1980) Sozialisation in der Hochschule, in: HURRELMANN, K. & ULICH, D. (Eds) *Handbuch der Sozialisationsforschung* (Weinheim, Beltz).
- HUBER, L. (1985) *Studiosituation heute und Wandel der Studentenrolle* (Hamburg, Hochschuldidaktische Stichworte 19).
- HUBER, L. (1988) Verändertes Bildungsverhalten, Wandel der Studentenrolle und Studienzeit, in: *Studienzeiten auf dem Prüfstand* (Hanover, HIS), pp. 113–138.
- HUBER, L. & PORTELE, G. (1983) Hochschullehrer, in: HUBER, L. (Ed.) *Ausbildung und Sozialisation in der Hochschule* (Stuttgart, Klett-Cotta, Enzyklopädie Erziehungswissenschaft 10).
- HUBER, L. & VOGEL, U. (1985) Studentenforschung und Hochschulsozialisation, in: GOLDSCHMIDT, D. et al. (Eds) *Forschungsgegenstand Hochschule* (Frankfurt, Campus), pp. 107–153.
- ISSERSTEDT, W. et al. (1986) *Das soziale Bild der Studentenschaft, 11: Sozialerhebung des Deutschen Studentenwerks* (Studien zu Bildung und Wissenschaft 42) (Bonn-Bad Godesberg).
- KATCHADOURIAN, H.A. & BOLL, J. (1985) *Careerism and Intellectualism among College Students* (San Francisco, Jossey Bass).
- KEIL, W. & PIONTKOWSKI, U. (1973) *Strukturen und Prozesse im Hochschulunterricht* (Weinheim).
- KELLERMANN, P. (1986) Dominante Phänotypen des Gesamtstudenten, in his: *Arbeit und Bildung*, Vol. 3 (Klagenfurt, Kärntner Druck- und Verlagsges.), pp. 86–120.

- KELLERMANN, P. (1987) Studienmotive und Arbeitsperspektiven von Erst-immatrikulierten. Forschungsbericht im Auftrag des Bundesministeriums für Wissenschaft und Forschung (Klagenfurt) (mimeo).
- KIEL, S. (1987) *Der Hochschullehrer als Betreuer* (Berlin (GDR), Deutscher Verlag der Wissenschaften).
- KOSLOW, A.A. & STARKE, U. (1985) *Lebensweise und Persönlichkeitsentwicklung von Studenten* (Leipzig, Karl-Marx-Universität).
- KRÜGER, H.J., MACIEJEWSKI, F. & STEINMANN, I. (1982) *Studentenprobleme. Psychosoziale und institutionelle Befunde* (Frankfurt/New York, Campus).
- KRÜGER, H.J. et al. (1986) *Studium und Krise. Eine empirische Untersuchung über studentische Belastungen und Probleme* (Frankfurt, Campus).
- LADD, E.C. & LIPSET, S.M. (1975) *The Divided Academy* (New York, McGraw Hill).
- LAURILLARD, D. (1979) The processes of student learning, *Higher Education*, 8, pp. 395-409.
- LIEBAU, E. (1987) *Gesellschaftliches Subjekt und Erziehung* (Munich, Juventa).
- LIND, G. (1981) Die zwei Ansätze zur Erfassung der Identität und ihre Integration, in: SOMMERKORN (1989), pp. 134-152).
- MARTON, F., HOUNSELL, D. & ENTWISTLE, N. (Eds) (1984) *The Experience of Learning* (Edinburgh, Scottish Academy Press).
- MORSCH, R. et al. (1974) *Ingenieure. Studium und Berufssituation* (Frankfurt, Akademische Gesellschaft).
- NEAVE, G. (1983) The changing face of the academic profession in Western Europe, *European Journal of Education*, 18(3), pp. 217-227.
- NEWBLE, D.J. & GORDON, M.J. (1985) The learning style of medical students, *Medical Education*, 19(1), pp. 3-8.
- OEHLER, C. (1986) Forschungsprobleme des internationalen Vergleichs von Hochschulsystemen und Hochschulplanung, in: HORNBOSTEL, S., OEHLER, C. & TEICHLER, U. (Eds) *Hochschulsystem und Hochschulplanung in westlichen Industriestaaten* (Kassel, Wiss. Zentrum für Berufs- und Hochschulforschung, Werkstattberichte 15), pp. 9-20.
- OLESON, V.L. & WHITTAKER, W. (1968) *The Silent Dialogue. A study in the social psychology of professional socialization* (San Francisco, Jossey Bass).
- OTTERSBUCH, G., GRABSKA, K. & SCHWARZE, E. (1988) Psychologie: Das verfehlte Studium (Hamburg, IZHD) (mimeo).
- PASCARELLA, E.T. (1985) College environmental influences on learning and cognitive development: a critical review and synthesis, in: SMART, J.C. (Ed.) *Higher Education. Handbook of Theory and Research*, Vol. 1 (New York, Agathon), pp. 1-55.
- PEISERT, H., BARGEL, T. & FRAMHEIN, G. (1988) *Studiensituation und studentische Orientierungen an Universitäten und Fachhochschulen, 2: Erhebung zur Studiensituation im WS 1984/85* (Studien zu Bildung und Wissenschaft 59) (Bad Honnef, Bock).
- PORTELE, G. (1981) *Entfremdung bei Wissenschaftlern* (Frankfurt, Campus).
- PORTELE, G. & HUBER, L. (1983) Hochschule und Persönlichkeitsentwicklung, in: HUBER, L. (Ed.) *Ausbildung und Sozialisation in der Hochschule* (Stuttgart, Klett-Cotta, Enzyklopädie Erziehungswissenschaft 10), pp. 92-113.
- PRAHL, H.-W. (1986) In Einsamkeit und Freiheit am Bildschirm. Verändern neue Medien die Hochschulausbildung?, *Hochschulausbildung*, 4(2), pp. 65-79.
- PREISSER, R. (1982) Literatur- und Forschungsdokumentation zum Thema Arbeiter-

- kinder als Gegenstand der deutschen Hochschulforschung (Berlin, Max-Planck-Institut für Bildungsforschung) (mimeo).
- RAMSDEN, P. (1985) Student learning research: retrospect and prospect, *Higher Education Research and Development*, 4(1), pp. 51-69.
- ROSSUM, E.J., DEJKERS, R. & HAMER, R. (1985) Students' learning conceptions and their interpretation of significant educational concepts, *Higher Education*, 14(6), pp. 617-641.
- ROSSUM, E.J. & SCHENK, S.M. (1984) The relationship between learning conception, study strategy and learning outcome, *British Journal of Education Psychology*, 54(1), pp. 78-83.
- SANFORD, N. (Ed.) (1962) *The American College* (New York, Wiley).
- SCHNEIDER, H. (1985) *Studentenbefragungen in der Bundesrepublik Deutschland. Methodische Problematik, Themen- und Ergebnisvielfalt* (Pfaffenweiler, Centaurus).
- SCHNITZER, K. et al. (1983) *Das soziale Bild der Studentenschaft in der Bundesrepublik Deutschland. Ergebnisse der 10. Sozialerhebung des Deutschen Studentenwerks im Sommersemester 1982* (Schriftenreihe Hochschule 46) (Bad Honnef, Bock).
- SCHÖBER, S. (1981) *Studienzeitverlängerung* (Düsseldorf, Mannhold).
- STARKE, K. (1980) *Jugend im Studium. Zur Persönlichkeitsentwicklung von Studenten* (Berlin (GDR, Deutscher Verlag der Wissenschaften).
- SMITH, R.M. (1983) *Learning How to Learn: applied theory for adults* (Milton Keynes, Open University Press).
- SNYDER, B.R. (1971) *The Hidden Curriculum* (New York, Knopf).
- SOMMERKORN, I.N. (Ed.) (1981) *Identität und Hochschule* (Blickpunkt Hochschuldidaktik 64) (Hamburg, AHD).
- STUDIENZEITEN AUF DEM PRÜFSTAND (1988) (Hanover, HIS Hochschulplanung 70).
- TEICHLER, U. et al. (1987) *Hochschule—Studium-Berufsvorstellungen. Eine empirische Lernuntersuchung zur Vielfalt von Hochschule und deren Auswirkungen* (Studien zu Bildung und Wissenschaft 50) (Bad Honnef, Bock).
- VOGEL, U. (1986) *Studienstrategien von Studenten. Biographische Analysen* (Frankfurt, Campus).
- WEIDMAN, J.C. (1989) Undergraduate socialisation, in: SMART, J.C. (Ed.) *Higher Education. Handbook of Theory and Research*, Vol. 5.
- WILDT, J. (1984) Forschung über Lehre und Lernen an der Hochschule, in: GOLDSCHMIDT, D. et al. (Eds) *Forschungsgegenstand Hochschule* (Frankfurt, Campus), pp. 155-179.
- WILSON, J.D. (1981) *Student Learning in Higher Education* (London, Croom Helm).