What are student education and educational related needs?

The primary objectives of this research were to find out from students their reasons for following higher education studies, and to determine their priorities when it comes to the choice of a higher educational institution. A similar survey was done among the directors and department heads of all 73 higher education institutions in The Netherlands. The results clearly indicate that administrators need to acquire a better understanding of their students' education-related needs.

Lily Lin

A student-centered education quality program requires education administrators and educators to adopt the basic marketing concept of customer-orientation. However, marketing, being a part of business concept, continues to stir discomfort among some education administrators. A letter from an education administrator, addressed to The Chronicle of Higher Education (a US bi-weekly newspaper for colleges and universities), read: 'Higher education simply cannot be forced into the narrow confines of business rhetoric' (Pederson 1992, B4). In 1984, a commercial marketing research firm in The Netherlands (Market in Kaart, cited in Bamossy 1992) surveyed Dutch nonprofit organizations including higher educational institutions. One of the most frequently given reasons for not using marketing consultants was: 'Nonprofit organizations do not have to be market oriented'.

Lily Lin is the senior marketing lecturer at the Hotel School in The Hague, The Netherlands. She graduated from the University of Maryland in the US and has a B.S. degree in Management (specializing in marketing) and a B.A. degree in psychology. She did her MBA at California State University. Currently she is in the final stage of her Ph.D. at the Amsterdam University. This research is part of her thesis on 'A Strategic Paradigm: Linking Marketing and TQM in Higher Education Institutions'.

These views reflect the deep-rooted distrust among some members of academia on anything that is related to the business community. This kind of suspicion, of course, is more likely based on misunderstanding of business and management principles than on reality.

Seymour (1995) argued that such scepticism is mostly because of the misinterpretation of the language used in business concepts. For instance, 'customer-orientation' holds the notion that students are more important than education administrators and professors. This may not suit the ego of some administrators and professors. Nevertheless, the reality remains, a university without students cannot be considered a university – no matter how many administrators and professors are employed by the institution.

The term, 'customer-orientation', could also be interpreted that students have all the rights to make demands but none of the obligations to comply with university regulations and performance requirements. This, of course, couldn't be further from the truth.

In a profit organization, customers are expected to abide by a set of rules and regulations stipulated by the seller. For instance, a customer is not allowed to cause disturbances in a restaurant or movie theatre. Failure to observe the rules could result in an unpleasant consequence for the customer. This same principle applies to higher educational institutions as well. In addition, in applying the customer-orientation concept, students should be treated like health club clients and not department store customers. The difference is that a health club client must work in order to gain benefit, i.e. the 'no pain, no gain!'.

This concept of 'no pain, no gain' implies that in order to achieve education quality, students are expected not only to participate in the education process but to put in real hard work.

In term of the above statement, 'Nonprofit organizations do not have to be market oriented', from the educational institutions' perspective, 'the fundamental questions that drive performance in most organizations are essentially the same' (Seymour 1995, P. 151). To prove his point, Seymour compared a list of quality management questions from the employee pocket guide distributed by Hewlett-Packard (a multinational computer and electronic company) and a list of questions presented by the American Association for Higher Education for implementing successful assessment. A striking similarity emerged between the two lists of questions (see Table 1).

From the above stated questions, it should become clear that in order to deal with education quality issues, it is necessary to acquire an in-depth understanding of students' education and educational-related needs first – this desire and the effort exerted to find out student needs is the first step towards market orientation. The knowledge of student needs not only will provide the institution with a set of criteria for assessing and measuring education quality. In addition it provides information on student needs, which is necessary for formulating education philosophy and goals, as well as developing and designing the institution offer.

TABLE 1
FUNDAMENTAL QUESTIONS THAT DRIVE PERFORMANCE

American Association for Higher Education's 'Implementing Successful Assessment'	*Hewlett-Packard's Question for Total Quality*
1. Who are our students, and why do they come here?	1. Who are my customers?
2. What should a graduate be like?	2. What do they need?
3. How do students change – and why?	3. What is my product or service?
4. How do students talk about their own learning?	4. Does my product or service exceed their expectations?
5. Is there a better way to organize the curriculum?	5. What is my process for providing the need?
6. How could we do better?	6. What corrective action is needed to improve the process?

Source: Seymour, Daniel (1995). TQM: Focus on performance, not resources. Brent D. Ruben (Ed.), *Quality in Higher Education* (pp. 145-156). USA: Transaction Publishers.

Student needs research

An extensive field research was carried out during the first part of 1996 to find out student education and educational-related needs. Two questionnaires were constructed, one for the students and the other, education administrators.

There were four major research questions (that were included in both student and education administrator questionnaires):

1. *What are the perceived benefits for attending college/university study?*
This question could provide the necessary insight on student broad education and educational-related needs (BEN) that are mostly related to the decision of attending higher education study in general but are not necessarily related to the decision of selecting a particular higher educational institution.

Examples of attributes included in this question were: 'need to be successful in life'; 'need to gain well-rounded education'; and 'need to develop talent'. A total of 22 attributes were included in this question.

2. *What attributes will most likely influence students in choosing a particular higher educational institution?*
This question could provide the insight on students' specific education and educational-related needs (SEN) that contribute to the final decision of selecting a given higher educational institution.

Examples of attributes included in this question were: 'need to have quality of education'; 'need to have student life'; and 'need to have modern facilities'. A total of 21 attributes were included in the question.

3. *What types of communications, e.g., advertising, personal contact, school catalogue, etc., do students prefer while considering which institution to study?*
This question provides the answer for higher educational institutions on the types of communications and communication channel(s) preferred by students.

4. What information subjects are most important during the student institution choice process?
The answer to this question provides the insight on student important information subject needs (IIS). Thus, information topics that are concerns of students could be included in the institution's central message when designing marketing communications strategy.

There were also three additional questions that dealt with the decision-related issues:

- Who are most likely to provide the necessary information? (This question was included in the student questionnaire only.)
- Who are most likely to be the important influences during the students' decision-making process? (This question was included in both student and education administrator questionnaires.).
- How many schools will students most likely apply to? (This question was included in the student questionnaire only.)

The answers to the first two questions allow the educational institution to target its marketing communications to the right audience. The third question provides insight on students' short-lists. Each institution should find out which other institutions are also most likely to be on the students' short-lists and use this information about its competition when custom designing its marketing communications. For education administrators, two additional questions were included in their questionnaire:

- What is your opinion about the effectiveness of marketing applications in higher educational institutions?
- What is your opinion about the effectiveness of TQM (total quality management) applications in higher educational institutions?

Research design

The sampling was carried out among both students and education administrators. A total of 1,072 students from seven HBO schools with a combined student population of 12,238 were surveyed. Because in some cases, the size of schools varied considerably, a proportional stratified sampling method was used. The sample size represented 8.7% of the total population.

Males respondents represented 44% of the total samples and female respondents, 56%. More than 94% of the respondents were 25 years or younger. In terms of r academic-level respondents, 69% were in their first or second year of study, and the re nder in their third or fourth year. Almost 95% of all respondents were Dutch.

A similar questionnaire was also sent to all 153 directors from 73 HBO schools in The Netherlands and 25% of the 1,055 department heads, totalling 422 questionnaires. The number of returned questionnaires was 170, which represented a 40% return rate. More than 53% of the directors returned their questionnaires compared to 26% of the department heads and 1% other.

Approximately 30% of the respondents expressed interest in receiving a copy of the research report personally. This was unexpected because in order to ask for the research report, respondents had to disclose their name and address.

erms of education administrators' demographics, 87% of the respondents were males and only 13%, females. Most of the respondents (56%) were between 30 and 50 years of age and 43%, older than 50. Out of 170 returned questionnaires, 51% of the respondents stated that they were directors, 42%, department heads, and 7%, other. More than 57% of the respondents worked in the same institution longer than 10 years, 20%, 6 to 10 years, and 23%, 5 years or less.

Questionnaire design

In addition to an exhaustive desk research on similar studies (Carnegie Foundation 1986, Chapman & Johnson 1979, Ferguson & Wisner 1985, Fidler 1986, Heischmidt & Kellerman 1994, Marshall & Delman 1984, Sevier 1987, Stewart 1987, Welki & Navratil 1987, Wiese 1994), the questionnaire developed for the research was also based on several brainstorming sessions from a focus group made up of marketing research students. Both the literature research and the focus group sessions helped to ensure that all necessary variables were included in each of the research questions and that alternative responses were appropriate. Once the initial questionnaire was complete, the questionnaire was pretested by two other groups of marketing research students. The questionnaire was then revised twice in order to make the appropriate improvements and/or changes.

Two types of questions were included in the questionnaires: Questions that measured attribute or variable importance, and questions that showed demographic characteristics. To assess attribute/variable importance, a four-point scale was designed. An even number scale was used in order to avoid neutral answers, such as, 'no opinion', or 'don't know'. Demographic characteristics were included to describe the students as well as education administrators.

Data Collection

For student survey, data were collected at the location(s) of each of the HBO institutions. Questionnaires were distributed randomly at the lobby of each of the seven educational institutions to incoming and outgoing students. Respondents were asked to take 20 minutes to fill out the questionnaire. For the education administrator survey, data were collected by means of a mail questionnaire.

Analysis plan

The results of both the student and education administrator questionnaires were analyzed using the Statistical Package for the Social Sciences (SPSS). Frequencies, valid percentiles, ranking, arithmetic mean, standard deviation, were assessed for all variables. A T-test was applied to some of the variables. Factor analysis was subsequently performed on the outcomes of two selected research questions.

Factor analysis is a 'procedure for data simplification through reducing a set of variables to a smaller set of factors or composite variables by identifying dimensions underlying the data' (McDaniel, Jr., & Gates 1993, P. 639). Thus, variables that share the same underlying dimension tend to load high on one factor and low on other factors. These underlying dimensions, or factors, therefore, could be used to explain a complicated phenomena.

In addition, scale reliability analysis was used. The scales are created based on the factor analyses outcomes. While factor analysis does not provide the collective mean of each factor, scale analysis does. Thus, scale reliability analysis allows a group of factors to be ranked in importance according to their means. Furthermore, scale reliability analysis provides an insight on the reliability of a given scale, that is, its consistent ability in measuring whatever it is designed to measure. The greater the reliability of a scale, the closer it is to 1.0 (perfect reliability), and the less likely measurement errors will occur, and visa versa.

Student survey: Broad Education and education-related Needs (BEN)

Student respondents were asked to rank the importance of the 22 attributes included in the question, using a four-point scale, ranging from not at all important, not important, to somewhat important, and very important.

TABLE 2
STUDENT SURVEY: BEN TOP-TEN LIST

RK	*Attribute*	*Valid %*	*Mean*
1.	– Gain well-rounded education	95%	3.642
2.	– Learn interesting things	93%	3.536
3.	– Have a satisfying career in life	92%	3.470
4.	– Develop talent	87%	3.300
5.	– Become a well-rounded person	84%	3.212
6.	– Be successful in life	80%	3.132
7.	– Have a good income	77%	3.077
8.	– Prepare for an occupation	76%	3.029
9.	– Be an authority in a specialized field	64%	2.770
10.	– Be a responsible person	57%	2.586

TABLE 3
STUDENT SURVEY – SCALE IMPORTANCE RANKING OF BEN

RK	*Scale Item*	*Mean*	*SD*
1	Well-Rounded Education	3.3761	.4839
2	Successful Life	3.0021	.6610
3	Personal Growth	2.6491	.6643
4	Social Concerns	2.3597	.7750
5	Least-Important Issues	1.7027	.6367

– Scale reliability for 'well-rounded education': $\alpha = 0.5811$
– Scale reliability for 'successful life': $\alpha = 0.7605$
– Scale reliability for 'personal growth': $\alpha = 0.6869$
– Scale reliability for 'social concerns': $\alpha = 0.6688$
– Scale reliability for 'other concerns': $\alpha = 0.7475$

TABLE 4
BEN SCALES AND ATTRIBUTES

Scale	*Attribute*	*Percent*
1. Well-Rounded Education	– Gain well-rounded education	95%
	– Learn things interesting	93%
	– Develop talent	87%
	– Prepare for an occupation	76%
2. Successful Life	– Have a satisfying career	92%
	– Be successful in life	80%
	– Have a good income	77%
	– Be powerful	41%
3. Personal Growth	– Become a well-rounded person	84%
	– Become more responsible	57%
	– Find direction in life	54%
	– Learn values and beliefs	41%
4. Social Concerns	– Gain social status	42%
	– Enjoy student life	50%
	– Broaden social contact	49%
5. Least-Important Issues	– Be with friends	22%
	– Be famous	21%
	– Take advantage of subsidy	18%
	– Fulfill parents' expectation	17%
	– Find a partner	17%
	– Don't know what else to do	15%

The following 10 attributes (reference Table 2) were rated – based on their mean values – as the most important attributes. The valid percentile indicates the percentile of respondents who thought that the given attribute was either very important or somewhat important.

Interestingly, the data in Table 2 shows that all of the top five attributes reflect the benefits of acquiring a balanced, intellectually challenged education, and they do not reflect the benefits of getting an occupational-related training. This demonstrates students' preference and their priority. Factor analysis was subsequently performed on student survey data.

The result showed that the 22 attributes were grouped into five factors. However, as mentioned previously, while factor analysis identifies and groups attributes that share the same underlying dimension, called 'factor', it does not provide the insight as to the importance of each factor measured by its collective mean. To resolve this issue, the five identified factors were turned into five scales and the collective mean of each scale was used to rank their importance.

Table 3 shows the scale item ranking. Note that the most important scale is 'to gain well-rounded education'. Scale 4, 'social concerns', which includes, attribute, student life, in comparison, is much less important. Scale, 'other concerns', is essentially made up of those attributes that were ranked among the least important. Precisely, what are the attributes included in each of the five scales?

Table 4 shows how the 22 attributes were grouped into five scales. The percentage of each attribute represents the number of respondents who thought that the given attribute was either very important or somewhat important.

3EN comparisons between education administrator/ student surveys

The education administrator survey sampled the entire population and therefore, it may be said that the outcc of the survey represent the population. On the other hand, student survey only sampled students from seven HBO schools. This means that while the survey outcomes represent the total student population within the seven HBO schools, student survey results may not represent the entire student population. Nevertheless, comparisons between education administrator and student surveys were made. This is based on the understanding that the interpretation of any disagreement(s) between students and education administrators survey outcomes are limited to the surveyed seven HBO schools.

In terms of the frequency and ranking comparisons (reference Figure 1.), the differences between stu ts and education administrators not only could be found in the ranking of attribute importance, in some cases, the differences were so large that it raised the question: 'What is important?' For instance, while students (84%) thought that 'to become a well-rounded person' was an important reason to attend higher education study, much less percentile of education administrators (52%) agreed.

In addition, factor analysis showed no conclusive evidence that from the education administrators' perspective, there were agreeable underlying dimensions for the 22 attributes.

Student survey: Specific Education and education-related Needs (SEN)

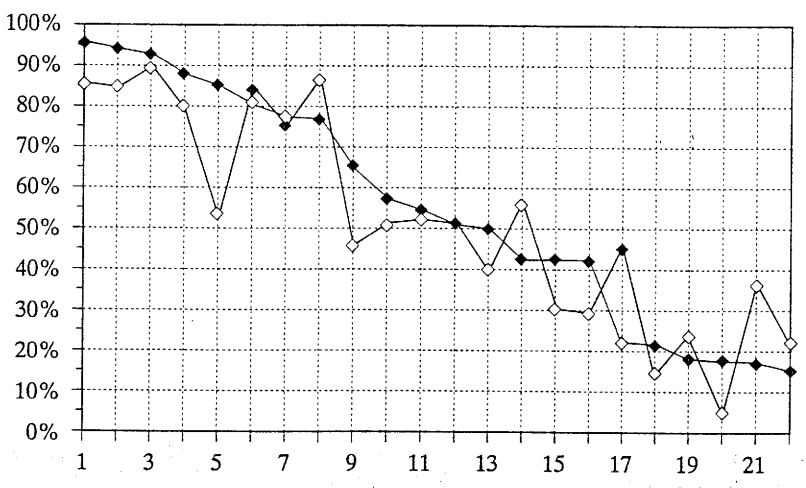
The total number of attributes for this question was 21. The same statistical analysis used in BEN was also applied to SEN. Table 5 shows the top-ten list of SEN even though 11 attributes are displayed. This is because Attribute 11, 'international faculty', is closely related to Attribute 9, 'international student body'.

Notice that the top eight attributes, with the exception of 'modern facilities', all reflect different aspects of education quality. The ninth and eleventh attributes, 'international student body' and 'international faculty', are also related to education. In fact, out of the top eleven attributes, only two attributes, 'modern facilities' and 'student life' are not directly related to education. This reflects students' priorities in rating the importance of the 21 attributes.

Another interesting finding was that while 95% of the respondents were Dutch, 45% of them thought that the international student body, and 39%, the international faculty, were important issues.

Subsequent factor analysis revealed that there were four underlying factors in SEN. These factors

FIGURE 1
STUDENT AND EDUCATION ADMINISTRATOR SURVEYS - A GRAPHIC COMPARISON OF BEN ATTRIBUTES



1 † To gain well-rounded education
2 † To learn interesting things
3 To have a satisfying career in life
4 † To develop talent
5 † To become a well-rounded person
6 To be successful in life
7 To have a good income
8 † To prepare for an occupation
9 † To be an authority in a specialized field
10 To be a responsible person
11 To find direction in life
12 To enjoy student life
13 To broaden social contact
14 † To gain social status
15 To learn values and beliefs
16 † To be powerful
17 † To be with friends
18 To be famous
19 To take advantage of student subsidy
20 † To find a partner
21 † To fulfill parents' expectation
22 Don't know what else to do

† The t-test result showed that the difference between the population means of the given attribute is statistically significant.

TABLE 5
STUDENT SURVEY: SEN TOP-TEN LIST

RK	*Attribute*	*Valid %*	*Mean*
1.	– Quality of education	83%	3.164
2.	– Career Opportunity	81%	3.178
3.	– School reputation	71%	2.875
4.	– Opportunity for traineeship	68%	2.848
5.	– Faculty qualifications	66%	2.783
6.	– Academic standards	62%	2.667
7.	– Modern facilities	52%	2.494
8.	– Curriculum emphasis	52%	2.477
9.	– Student life	47%	2.367
10.	– International student body	45%	2.368
11.	– International faculty	39%	2.251

TABLE 6
STUDENT SURVEY – SCALE IMPORTANCE RANKING OF SEN

RK	*Scale Item*	*Mean*	*SD*
1	Quality of Education	2.8537	.6631
2	International	2.3071	.9672
3	Facilities and Costs	2.1875	.7837
4	Student Life	2.1084	.6753

– Scale reliability for 'quality of education': $\propto = 0.8350$
– Scale reliability for 'international': $\propto = 0.8461$
– Scale reliability for 'facilities and costs': $\propto = 0.8058$
– Scale reliability for 'students life': $\propto = 0.8240$

were turned into four scales in order to rank their importance (reference Table 6).

According to Table 6, the most important scale is 'education quality'. This is consistent with the top-ten list shown in Table 5 that educational-related issues are, in general, more important in influencing students' decision-making in institution choice than non-educational issues. Consequently, facilities and costs, as well as student life, are secondary considerations. This means that for most students, if the quality of education is below standards, facilities and costs, and student life, alone will not attract them.

This research outcome is quite consistent with more than 30 research reports that dealt with student needs, published in the period of 1980-1994 – of which some were cited in Section II.2.2. 'Questionnaire Design', P. 6.

In fact according to Kealy and Rockel (1987), certain perceptions of quality appear almost universally. They identified three quality dimensions as being universal. Table 7 compares the three quality dimensions identified by Kealy and Rockel with the SEN research outcome. It should become obvious that the SEN research outcome shows no conflict with the universal dimensions of quality.

Furthermore, notice that one of the attributes in scale, 'social concerns' was 'student life' (see Table 8 – which displays how the 21 attributes in SEN were grouped into four scales. The percentile represents those respondents who rated the given attribute either as very important or somewhat important). The data showed 47% of the students thought that 'student life' was either a very important or somewhat important issue. Interestingly, in the survey outcome of BEN (reference Table 4), scale, 'social concerns', one of its attributes, also 'student life', showed that 50% of the students thought that it was either a very important or somewhat important issue. It seems that students' responses were quite consistent.

SEN comparisons between education administrator/ student surveys

When the student survey outcome of SEN attributes was compared to the survey outcome of education administrator survey (reference Figure 2), even larger discrepancies than BEN comparisons became evident. For instance, while 78% of the education administrators thought 'distance' was either a very important or somewhat important issue, only 34% of the students agreed. This indicates that even though some of the students thought that 'distance' was an important criteria, the majority did not In a more detailed analysis, it showed that in some schools, distance is a relatively more important issue than others, indicating that geographically speaking, some of the schools tend to be more regional than others.

Nevertheless, none of the student subgroups gave the indication that an overwhelming majority of the respondents were concerned with the distance issue. The highest subgroup percentile was 57% with a mean of 2.545, and the lowest, 13% with a mean of 1.558. Furthermore, even among those subgroups (three out of seven subgroups) which showed more concern over the distance issue, without exception, none included distance as their top-five attributes, and they still rated 'education quality' and 'career opportunity' as their primary concerns. This appears to indicate that even if distance was a concern for some of the students, they, nevertheless, thought education

quality was a much more prevalent issue.

In terms of the responses from the education administrators, on the one hand, they rated the top three attributes in SEN:

1 School reputation
  % with a mean of 3.320
2 Quality of education
  87% with a mean of 3.120
3 Distance
  78% with a mean of 3.192

On the other hand, attribute, 'academic standards', was given a rather low importance rate (46% with a mean of 2.399 and was ranked eleventh place). This raises two interesting questions:

- If academic standards are not an integral part of education quality, what, in the eyes of education administrators, constitute 'education quality'?
- For a higher educational institution, what sort of reputation should it try to build if not a superior academic standards?

In terms of factor analysis (reference Table 6), while students defined the underlying factors, education quality, internationalization, facilities and costs, and social concerns, with overwhelming clarity and consistency, the same could not be said about the research outcome of education administrators. In fact, the subsequent factor analyses on the data of education administrators did not reveal conclusive evidence in terms of the underlying dimensions of specific education and educational-related needs.

Student and education administrator surveys: the most helpful types of communications

Type of communications' refers to the kind of communications offered and the communication channel utilized to deliver the institution's messages. For example, a school curriculum catalogue may be mailed to potential students, or it may be provided as a part of person-to-person communications.

In this question, 10 variables, such as, school promotional materials, information day at the school, etc., were given and the respondents were asked to rate their helpfulness on a four-point scale.

According to the students' responses (see Figure 3), the most helpful type of communications were schools' promotional materials, the second, information day, and the

TABLE 7
A COMPARISON OF THE UNIVERSAL QUALITY DIMENSIONS AND THE SEN RESEARCH OUTCOME

Universal Quality Dimension	*SEN Research Outcome*
• Academic Quality	• Education Quality • Internationalization
• Social Life Atmosphere • Campus Location	• Social Concerns • Facilities and Costs

TABLE 8
SEN SCALES AND ATTRIBUTES

Scale	*Attribute*	*Percent*
1. Education Quality	– Quality of education	83%
	– Career opportunity	81%
	– School reputation	71%
	– Opportunity for traineeship	68%
	– Faculty qualifications	66%
	– Academic standards	62%
	– Curriculum emphasis	52%
2. International	– International student body	45%
	– International faculty	39%
3. Facilities & Costs	– Modern facilities	52%
	– Student accommodations	*38%
	– Tuition costs	32%
	– Financial aid availability	28%
	– Religious orientation	8%
4. Social Concerns	– Student life	47%
	– Student accommodations	*38%
	– Size of school	37%
	– Student organizations	32%
	– Recreation outside of school	27%
	– Recreation inside of school	25%

* Attribute, 'student accommodations' showed high factor loadings in both 'Facilities & Costs' and 'Social Concerns' factors. Thus, this attribute was included in the calculation of scale means of 'Facilities & Costs', and 'Social Concerns'.

† Attributes, 'distance' and 'female and male ratio' did not show significant relationship with any of the four factors and therefore, they could not be counted as a part of scales. However, 34% of the respondents thought that 'distance' was either very important or somewhat important in their decision-making, as opposed to 28% for 'female and male ratio'.

° Attribute, 'religious orientation', was excluded from the scale 'facilities and costs' because its alpha was higher (.8059) than the original scale reliability coefficients (.7892). However, 8% of the respondents thought that 'religious orientation' was an important or somewhat important attribute.

third, information obtained during school presentation.

When the student responses were compared with the education administrator survey (again, see Figure 3), it seems that education administrators were considerably more convinced the importance of various types of communications than students. For example, 96% of the education administrators thought that personal recommendation was either very important or somewhat important and only 44% of the students shared the same opinion. Other major differences in opinions included: Information received from school, counsellors (80% versus 28%), institution curriculum catalogues (45% versus 24%), and news report (41% versus 14%).

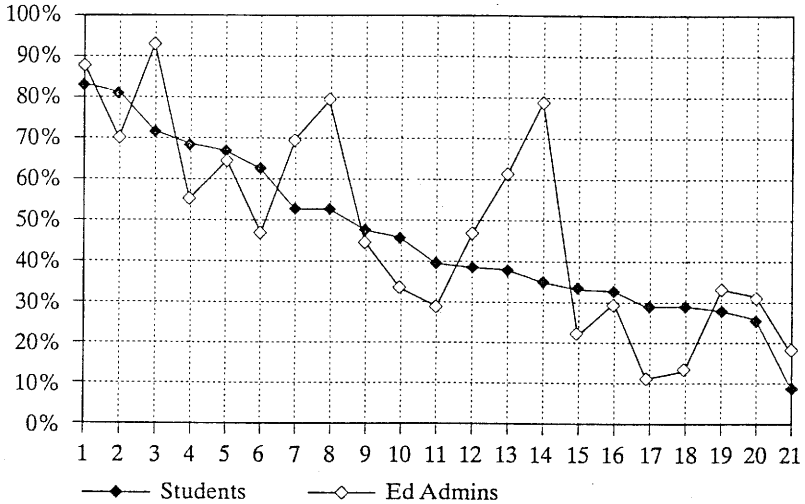
These differences indicate that perhaps, students are not so easily sold by promotion alone. In fact, it could be the reason as to why students' response to this question showed low percentiles for all of the communication categories listed in the question.

This does not mean that promotional communications are not useful. However, an educational institution can only be as good as the quality of its education. Thus, promotional communications can only be effective – if what the educational institution has to offer is what it claims to be. Even the best promotional materials cannot cover up poor education quality for long. For this reason, students were absolutely right that they appeared to be somewhat reserved in judging the helpfulness of various types of marketing communications.

On the other hand, education administrators appeared to be somewhat overly optimistic and held, perhaps, unrealistic expectations in relying on the effectiveness of promotional communications to convey the quality of their offer and to attract new students.

Indeed, according to Doyle and Newbould (1980), in an university setting, effective marketing comes from, first, recognizing and defining the right marketing mix, and allocating resources to design and produce the right marketing mix, and second, developing a differential advantage in order to become a preferred choice for potential students. Based on their argument, short-term selling offers limited advantage.

FIGURE 2
STUDENT AND EDUCATION ADMINISTRATOR SURVEYS - A GRAPHIC COMPARISON OF SEN ATTRIBUTES



1 Quality of education
2 † Career opportunity
3 † School reputation
4 † Opportunity for traineeship
5 Faculty qualifications
6 † Academic standards
7 † Modern facilities
8 † Curriculum emphasis
9 Student life
10 International student body
11 International faculty
12 Student accommodations
13 † Size of school
14 † Distance
15 Tuition costs
16 Student organizations
17 † Female and male ratio
18 † Financial aid
19 Recreation outside of school
20 † Recreation in school
21 † Religious orientation

† The t-test result showed that the difference between the population means of the given attribute is statistically significant.

Student and Education Administrator Surveys: The Most Important Information Subjects (IIS)

A total of 26 variables were given in this question. Respondents were asked, as in other questions, to rate each variable on a four-point scale. Many of the variables included in this question were identical to that of the attributes included in the question dealing with student specific education and educational-related needs (reference Section II.1., Research

Issues, Question 2). The assumption was that students would find those information subjects that were closely related to the criteria used to select an educational institution most important. Consequently, the response to those variables that were common to both questions should show similar results.

Looking at Figure 4, which compares student survey data of those attributes that are common to both SEN and IIS, indeed, students' responses for both questions appear to be very consistent.

On the other hand, while the rankings stay somewhat stable across the variables for this part of education administrator survey, the frequency and percentile of some of the variables fluctuated considerably (see Figure 5). In fact, when comparing the survey outcomes of SEN and IIS, 10 out of 19 variables showed 7 or more percentile spread with eight of these variables showing more than 10 percent spread. The percentile spread in the above mentioned 10 variables ranged from 7 – 20 percent. Why were the inconsistencies?

It was not clear as to why there were so many inconsistencies in the education administrators' responses. One would expect that education administrators would be more consistent than the students.

One could only speculate that in part, it was probably due to the generation gap. More importantly, however, it was possible that education administrators were not in tune with students' education and educational-related needs, and they lacked a systematic approach in acquiring information and knowledge about students and their needs. Furthermore, it was also possible that education administrators were not accustomed to asking critical marketing questions, such as: 'How do students prioritize their education and educational-related needs?'; 'What constitutes quality of education?'; and 'What are the dimensions in a superior institution reputation?' All of them, of course, are fundamental issues and are terribly important in the first step towards improving education quality.

Another possibility is that because most of the higher educational institutions depend on government for subsidy, therefore, they tend to serve the government instead of their students. Van Reekum and Van der Velpen (1985) confirmed this view and asserted that subsidized organizations pay more attention to the wishes of the subsidy giver than to the groups they are mandated to serve.

This helps to create a rather odd situation – education administrators are much more accustomed to focusing their energy on finding out and fulfilling government demands. In the process of doing so, the needs of students are treated as secondary issues since as mentioned above, higher educational institutions rely on government subsidy to sustain themselves and therefore, failure to fulfil students' needs causes no direct and immediate consequences.

Student survey: Who are those most likely to provide the necessary information?

Based on the data from student surveys, students (69%) were the ones who provided the necessary information to make a decision on college

FIGURE 3
THE MOST HELPFUL TYPE OF COMMUNICATIONS

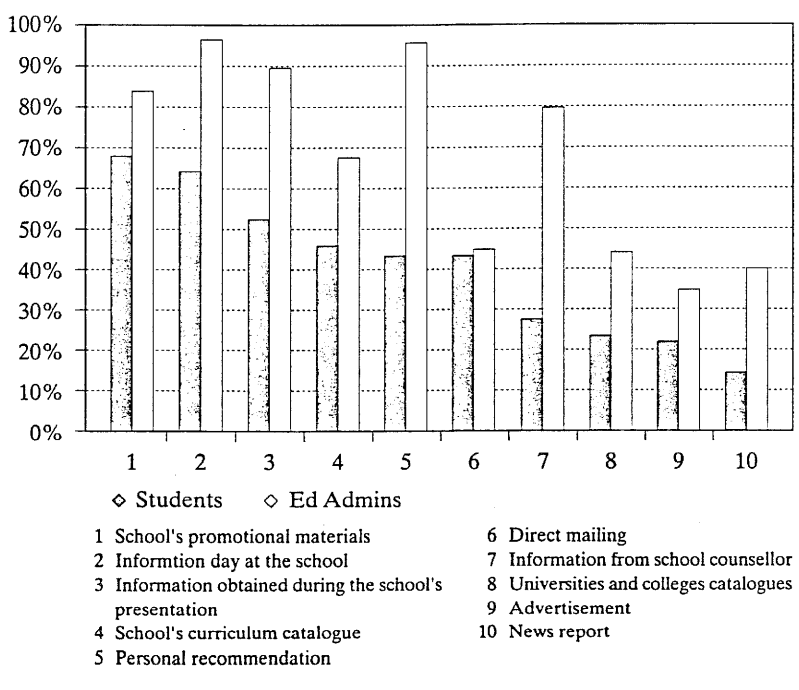
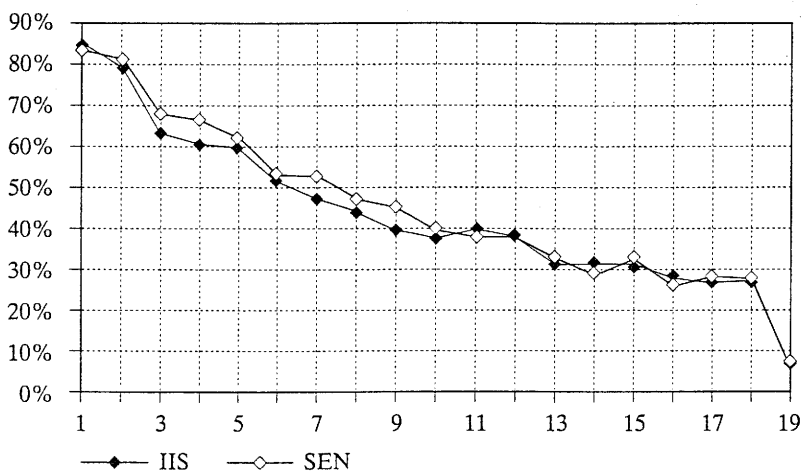


FIGURE 4
STUDENT SURVEYS - A GRAPHIC COMPARISON OF RESPONSES OF SEN AND IIS



1 Quality of education
2 Career opportunities
3 Opportunities for traineeship
4 Faculty qualifications
5 Academic standards
6 Modern facilities
7 Curriculum emphasis
8 Student life
9 International student body
10 International faculty
11 Size of school
12 Student accommodation
13 Tuition costs
14 Financial aid
15 Student organization
16 Recreational activities in school
17 Female/male student ratio
18 Recreational activities outside of school
19 Religious orientation

* Only those variables that were included in both SEN and IIS questions are shown in the above graph.

choice. School counsellors (33%), and friends and relatives (26%), also were information providers. However, only 5% of the respondents said that their parents were the ones who provided the necessary information.

An interesting survey outcome was that merely 6% of the respondents said that they made the decision without information – reflecting the importance of education information since most of respondents used some type of information to help them to make the decision.

Student and education administrator surveys: Who are those most likely to be important influences?

As indicated in Figure 6, while both students and education administrators agreed that students themselves were the most important influences, the rest of the responses to this question differed in opinion considerably. In general, education administrators overestimated the importance of oher influences in their role of helping students to make their decision in selecting a higher educational institution.

Besides students themselves, it seemed that parents, friends, representatives from a higher educational institution, and school counsellors, also exerted some influences. However, according to students, they were considerably less influential.

In fact, when students were asked the same topic in a separate question: 'Who was/were the primary decision-maker(s) in the process of selecting a school?', students further confirmed (see Figure 7.) that the students themselves were the primary decision-makers (90%).

Student survey: how many schools will students most likely apply to?

More than 94% of the respondents said that they had applied to between one and three schools. Only 4% applied to between four and five schools, and 3% applied to more than five schools. This indicates that most students are rather selective, and their short-list is, indeed, short.

It will be interesting for each educational institution to find out which other educational institution(s) are most likely to be on their students' short-list. Obviously, these are the institutions that will present the strongest competition. In defining marketing mix and designing marketing communications strategy, competitors' strengths and weaknesses should be taken into consideration.

Student survey: percentile of courses passed the first time

In order to determine the effectiveness of the current education system, students were asked: 'How often do you pass a course the first time?' Table 9 is the data indicating the responses percentile breakdown:

It seems that most students have failed one or more courses during their studies. It was not clear as to why failing courses were actually the norm, and those who passed all courses were the minority. It would be worthwhile for education administrators to pinpoint the cause(s) and seek solutions because regardless of the reason(s), one thing is for sure, large failing rate indicates ineffectiveness in the current education system and tremendous amount of waste in time and money for both students and educational institutions.

Furthermore, in a previous discussion (see Section II.3.2.1.), it was mentioned that education administrators

gave low importance to the SEN attribute, 'academic standards'. This raises a speculative answer to the issue of student high failing rate: 'Could it be that the education administrators' low regard for academic standards has helped to contribute to t' · students' high failing rate?'

As argued in the introduction (reference Section I.), quality of education requires students to put in really hard work. High academic standards imply high expectations from the educational institution for both potential and current students. On the one hand, this helps the educational institution to attract those potential students who are more likely to meet such expectations. On the other hand, it helps to motivate current students to achieve superior performance with a measurable result. Low regard towards academic standards diminishes the effectiveness of built-in motivation factors for superior student performance and an essential performance measuring device for student progress feedback.

Education administrator survey: opinions on the effectiveness of marketing and TQM applications in higher educational institutions

Education administrators were asked to rate the effectiveness of marketing management and TQM concepts applied to higher educational institutions (see Table 10). These questions were not meant to find out how well education administrators understand marketing and TQM concepts. That is another issue. The purpose of the questions was merely to find out the attitude of education administrators towards marketing and TQM concepts.

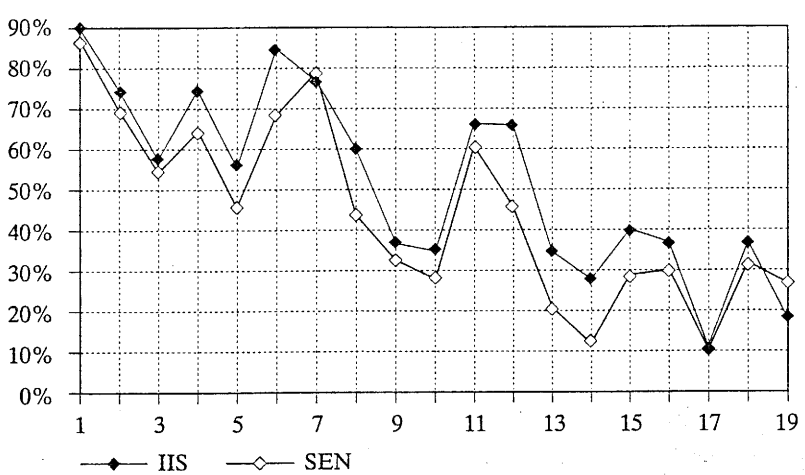
Overall, education administrators gave an overwhelmingly positive vote to the effectiveness of marketing and TQM applications in improving performance of higher educational institutions. However, this could be due to the fact that in recent months, the Dutch government has been pushing higher education reform – by way of offering grants – in order to encourage higher educational institutions to adopt a quality management program aiming to improve education quality. Thus, while positive responses are good signs, nevertheless, only time will tell whether this favourable attitude towards modern management in higher education community is a fad or the beginning of a sustained change.

Summary and conclusions

Two sets of research with similar questionnaires were carried out simultaneously. One was for the students from seven HBO educational institutions and the other, for the education administrators from all (73 in total) of the Dutch HBO educational institutions.

According to the student survey, five factors were identified as the reasons (perceived benefits) why students go for higher educational studies, and they include, in order of importance, the following:

FIGURE 5
EDUCATION ADMINISTRATOR SURVEYS - A GRAPHIC COMPARISON OF RESPONSES OF SEN AND IIS



1 Quality of education
2 Career opportunities
3 Opportunities for traineeship
4 Faculty qualifications
5 Academic standards
6 Modern facilities
7 Curriculum emphasis
8 Student life
9 International student body
10 International faculty
11 Size of school
12 Student accommodation
13 Tuition costs
14 Financial aid
15 Student organization
16 Recreational activities in school
17 Female/male student ratio
18 Recreational activities outside of school
19 Religious orientation school

* Only those variables that were included in both SEN and IIS questions are shown in the graph.

FIGURE 6
STUDENT AND EDUCATION ADMINISTRATOR SURVEYS - A GRAPHIC COMPARISON ON IMPORTANT INFLUENCERS

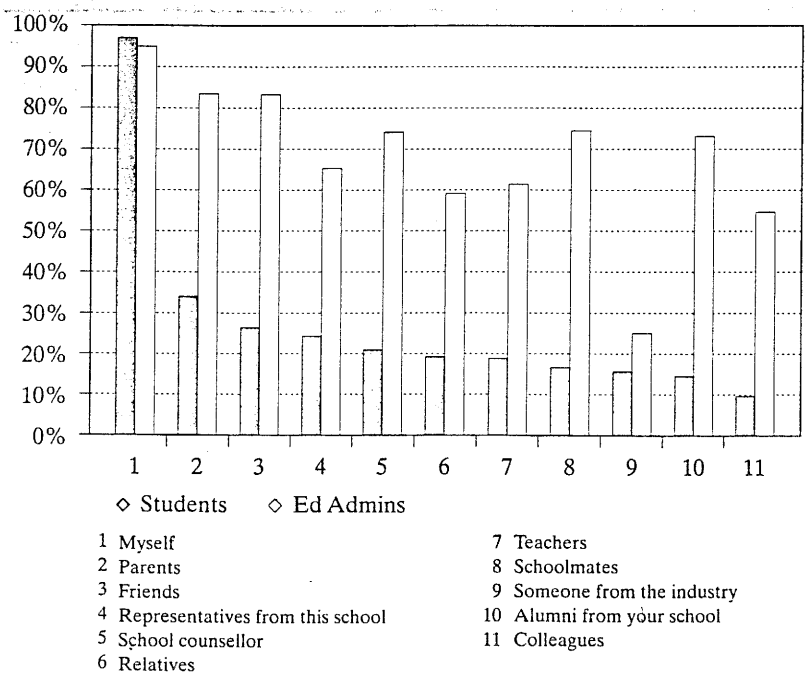
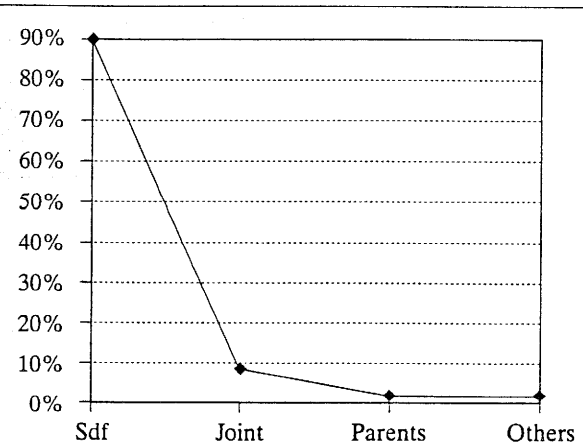


FIGURE 7
WHO WAS THE DECISION-MAKER?



- Well-rounded education
- Successful life
- Personal growth
- Social concerns
- Other issues

Each factor is defined by several attributes. Thus, this and the subsequent findings help to establish the theory that students do not base their decisions on a single reason. Rather, they base their decisions on a group of closely related perceived benefits.

In terms of application, the BEN information is necessary for establishing organization mission, education goals, and education philosophy. Students further identified four factors as the reasons (perceived benefits) for attending a particular higher educational institution. They are listed below in order of importance:

- Quality of education
- International
- Facilities and costs
- Student life

Information on this part of research is the foundation for designing institution offers and establishing quality criteria. According to the students, the most helpful type of communication was the institutions' promotional materials. They further identified that quality of education was the most important information subject in their institution selecting decision. Only 6% of the students questioned said they did not rely on information to make their decision.

More than 97 percent of the students claimed that they themselves were the primary influence. This was further confirmed in a different question, where 90 percent of the students identified themselves as the major decision-maker.

Considerable gaps exist between the responses of students and the education administrators even

though it was not certain why the inconsistencies arose. A couple of speculative answers were suggested. Furthermore, while students indicated clearly what they believed to be 'quality of education' and the importance of this factor, it was not clear from the education administrators' p ective, precisely what 'quality of education' constitutes to them.

Of course, it should be pointed out that correctly detecting and accurately interpreting 'customer needs' are two of the most challenging marketing tasks. From time-to-time, even the best market-driven companies fail to predict and define 'customer needs'. Thus, as the result of this research, the focus of the education administrators should not dwell on their response inconsistencies. Rather, the important thing is to become aware that the needs of students are the foundation for establishing the criteria in measuring education quality and the starting point for customerorientation. Consequently, the emphasis is to seek ways to better understand, correctly interpret stud needs, and to utilize this information in dealing with the institution's internal and external education and business issues.

Finally, education administrators' were also asked their opinion about the perceived effectiveness of marketing and TQM concepts applied to higher educational institutions. The outcome was overwhelmingly positive. This may be due to the fact that student pools are shrinking and that the Dutch government has been putting pressure on higher educational institutions to utilize modern management concepts in order to carry out a sweeping education reform.

TABLE 9
FREQUENCY OF PASSING A COURSE THE FIRST TIME

Frequency of Passing A Course the First Time	%
• Always pass	28%
• At least 2/3 of the time	47%
• At least 1/2 of the time	18%
• Less than 1/2 of the time	5%
• Seldom	3%

TABLE 10
EDUCATION ADMINISTRATORS SURVEY – OPINIONS ON EFFECTIVENESS RATING OF MARKETING AND TQM APPLICATIONS

	N = 170	*Extremely effective*		*Somewhat effective*		*Won't help much*		*Won't help at all*	
Research Question	Mean	FQ	%	FQ	%	FQ	%	FQ	%
Marketing Applications:									
• To increase the quality of student recruitment	3.327	52	31%	100	59%	11	7%	4	2%
• To decrease student dropout rate	2.782	19	11%	101	59%	43	25%	6	4%
• To increase student overall satisfaction	2.940	25	15%	113	67%	25	15%	5	3%
TQM Applications:									
• To increase the quality of student recruitment	3.198	52	31%	100	60%	11	7%	4	2%
• To decrease student dropout rate	3.120	51	30%	89	52%	23	14%	4	2%
• To increase student overall satisfaction	3.287	62	37%	94	56%	8	5%	3	2%

References

Bamossy, Gary J. (1992). *The public and nonprofit sector in the Netherlands.* In Symour H. Fine (Ed.), Marketing the public sector: Promoting the causes of public and nonprofit agencies (pp. 56-67). USA: Transaction Publishers.

Carnegie Foundation for the Advancement of Teaching (November/December 1986). Trendlines. Change, 31-33.

Chapman, D.W., & Johnson, R.H. (1979). *Influences on students' college choice: A case study.* Ann Arbor, Michigan, USA: Project CHOICE, School of Education, University of Michigan.

Discenza, R., Ferguson, Jeffrey M., & Wisner, Ronald (Spring, 1985). *Marketing higher education: Using a situation analysis to identify prospective student needs in today's competitive environment.* NASPA Journal, 22, 18-25.

Fidler, Paul Davis (1986). *Comparison of USC entering freshmen, 1976 to 1986.* South Carolina University Columbia Division of Student Affairs. 1-15.

Heischmidt, Kenneth A., Kellerman, Bert J. (1994). *How graduates view general education: Implications for marketing in higher education.* Journal of Marketing for Higher Education, 5(1), 71-85.

Kealy, Mary Jo, & Rockel, Mark L. (November/December 1987). *Student perceptions of college quality: the influence of college recruitment policies.* Journal or Higher Education, 58(6), 683-703.

Marshall, John F., & Delman, Jeffrey M. (Summer 1984). *Researching institutional image: The development and implementation of a market research plan for educational institutions.* College and University, 316-333.

McDaniel, Jr., Carl, & Gates, Roger. (1993). *Contemporary Marketing Research, 2d ed.* New York, USA: West Publishing Company.

Pederson, R. (1992). *The perils of Total Quality Management: Bringing business rhetoric to academe.* The Chronicle of High Education, B4.

Sevier, Robert (November-December 1987). *How students choose a college.* Currents, 13, 46-52.
Seymour, Daniel (1995). TQM: *Focus on performance, not resources. Brent D. Ruben (Ed.),* Quality in higher education (pp. 145-156). USA: Transaction Publishers.
Stewart, John D. (1980). *From growth to standstill.* In M. Wright (Ed.), Public spending decisions. London, England: Allen & Unwin.
Van Reekum, G., & Van der Velpen, P. (1985). *Strategische perspectieven voor gesubsidieerde nonprofit organisaties. M & O,* (4)5, 287-300.
Welki, A.M., & Navratil, F.J. (1987, Winter). *The role of applicants' perceptions in the choice of college.* College and University, 62, 147-60.
Wiese, Michael D. (1994). *College choice cognitive dissonance: Managing student/institution fit.* Journal of Marketing for Higher Education, 5(1), 35-47.

Summary

The primary objective of this research, carried out amongst all 73 higher education institutions in The Netherlands, was to find out from students what their reasons were for following higher educational studies, and to determine their priorities in selecting a higher educational institution. The results indicate that the most important factor for attending such studies is 'to gain well-rounded education'. Quality of education is considered the most important factor and social environment, the least important. Students further define quality of education according to seven critical attributes.

A similar survey was distributed to the directors and department heads of the same 73 higher educational institutions. The results showed considerable differences from that of the students' study. The author concludes that this indicates that education administrators need to acquire a better understanding of their students' education and education-related needs.

Zusammenfassung

Ein Qualitätsprogramm im Bildungswesen, das die Studenten in den Mittelpunkt stellt, verlangt von den Verwaltungs- und Lehrkräften, daß sie sich das grundlegende Marketingkonzept, nämlich die Kundenorientierung zu eigen machen. Daher war es das vorrangige Ziel dieser Forschungsarbeit, von den Studentinnen und Studenten zu erfahren, aus welchen Gründen sie an einer Hochschule studieren und nach welchen Prioritäten sie eine Hochschule aussuchen. Die Ergebnisse zeigen, daß der wichtigste Faktor für die Entscheidung zu Gunsten eines Studiums lautet: 'Eine vielseitige und abgerundete Bildung zu bekommen.' Für die Wahl der Hochschule spielt die 'Qualität der Ausbildung' die wichtigste Rolle, während das gesellschaftliche Umfeld die geringste Rolle spielt. Auch definieren die Studierenden die Qualität der Ausbildung anhand von sieben kritischen Merkmalen.

Eine ähnliche Umfrage wurde auch bei den Rektoren und Dekanen aller 73 Hochschulen und hochschulähnlichen Einrichtungen in den Niederlanden durchgeführt. Die Ergebnisse unterscheiden sich beträchtlich von den bei den Studierenden erhobenen Befunden. Daraus geht hervor, daß die im Bildungswesen tätigen Verwaltungskräfte ein besseres Verständnis für die Ausbildung und bildungsbezogenen Bedürfnisse il Studentinnen und Studenten ge nen müssen.

Résumé

Une étude sur la qualité de l'ens nement réalisée auprès des étudi nécessite l'adhésion des adminis teurs et des éducateurs à un con marketing fondamental : l'orie tion vers le 'consommateur-étudi Les principaux objectifs de cette de étaient donc de déterminer raisons pour lesquelles les étudi effectuaient des études supérie ainsi que les critères de sélection établissements d'enseignement su rieur. Les résultats montrent qu facteur qui compte le plus dans la cision de faire des études supérie est de bénéficier d'un 'enseignem bien équilibré'. La 'qualité de l' seignement' s'est révélé le facteur et 'l'environnement social' le fac le moins important pour le choix d établissement. Par ailleurs, les ét ants ont défini la qualité de l'ens nement en fonction de sept crit essentiels.

Une étude sur le même thèm été menée auprès des directe et administrateurs de la totalité 73 établissements d'enseigner supérieur aux Pays-Bas. Les résu montrent qu'il existe des diffé ces considérables par rapport à l' de réalisée auprès des étudi L'étude montre que les adm strateurs doivent acquérir une m leure compréhension des besoin leurs étudiants en matière d'ens nement.