

Facilitating progression to higher education from vocational pathways

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1. Introduction

This paper gives the results of an investigation carried out in England and the Netherlands into how to support transitions to higher education of students coming from school-based vocational pathways. This study was carried out as part of a seven country Leonardo (INTEQUAL) project looking at qualifications with a dual orientation both to the labour market and higher education. The investigation looked at issues around the progression to higher education of students from senior vocational education (mbo) in the Netherlands and Advanced General National Vocational Qualifications (GNVQ) programmes in England.

Both GNVQ and mbo are predominantly full-time school/college-based vocational pathways, aimed primarily at 16-19 (20) year olds, and are clearly differentiated from academic general education pathways. The starting point for the analysis was the widespread perception that students from vocational pathways may have particular problems with aspects of the transition to higher education. Staff perceptions of the skills required by students from these pathways to be successful in HE, and ways in which progression to HE can be facilitated, will be the focus of this paper. A companion paper (Brown, Moerkamp and Voncken, 1997) examined student perceptions of how well GNVQ and mbo had prepared them for their HE studies.

2. The Netherlands: progression from mbo in context

Earlier work gave fuller descriptions of mbo-courses and their role in facilitating both entry into the labour market and progression to higher vocational education (Moerkamp & Voncken, 1996; Manning ed., 1996). Senior vocational education (mbo) in the Netherlands has therefore a double qualifying function. Traditionally, mbo courses had qualified students for the labour market. However, an mbo-diploma simultaneously qualifies students to enter higher vocational education (hbo). Ever since the beginning of the eighties the latter function of mbo, offering possibilities to transfer to hbo, has gained in popularity. Ten years ago about 10% of all mbo graduates continued their education in hbo. Nowadays about 30% of the mbo students enter hbo courses after graduation. Statistical analyses indicate that in the year 2000 almost 45% of the mbo graduates will continue their study in hbo, and less than 50% will enter the labour market after graduation. These figures put the double qualifying function of mbo in a new perspective. The question is whether mbo schools should change their qualification strategies and adjust more to the requirements of hbo. Or should the conclusion drawn from these increasing transfer

rates be that mbo has been successful in realising double qualifications just by concentrating on the first goal: qualification for the labour market?

Table 1 shows the number of mbo graduates that continue in hbo and the number of mbo graduates that enter the labour market.

Table 1 Numbers of mbo students that enter hbo or the labour market after graduation

	1975	1980	1985	1990	1995
Number of students transferring to hbo					
absolute numbers (x1000)	2,1	3,9	5,6	12,3	15,3
%	6%	10%	10%	20%	29%
Number of students entering the labour market					
absolute (x1000)	31,9	33,5	44,5	43,6	36,0
%	87%	86%	83%	72%	68%
TOTAL absolute (x1000)	34	37,4	50,1	55,9	51,3
TOTAL % *	93%	96%	93%	92%	97%
* does not add up to 100% as a small percentage continue in mbo					

(National Bureau of Statistics: CBS. Matrices)

In 25 years the mbo population increased from 77,000 to 290,000 students, taking up over half of the group of young people aged between 16 and 19. Because of this huge growth, the increase of students continuing their study in hbo did not automatically lead to a decrease in the number of mbo graduates entering the labour market. Mbo could 'serve' hbo as well as the labour market. So far the labour market has been the main 'customer' of mbo schools, but the importance of hbo could not be ignored. In some occupational sectors already more than one third of the mbo graduates continue their education in hbo colleges. Mbo includes courses in four occupational sectors: technical courses, agricultural courses, health care and administrative/economic (commercial) courses. Although participation in all of them has increased; the increase has been most heavily concentrated in the administrative/economic sector. In 1995, 30% of all graduates were from technical mbo courses, 18% of graduates from agricultural courses, 32% of graduates from economics and 23% of the graduates in health care and social services, continued their education in hbo.

3 Higher vocational education (hbo)

In common with mbo, the number of students attending hbo schools has increased tremendously. In 30 years it has multiplied five-fold. In 1994 63,000 students entered hbo. Formal entry requirements for hbo are an havo-diploma or an mbo-diploma¹. Havo is senior

¹ In 1996 the Adult and Vocational Act (WEB) came into force. At the heart of the WEB is a national qualification structure for vocational education. The levels of qualification are in line with the European SEDOC system. Mbo courses at level IV (middle management training) are

general secondary education, which gives access to hbo, but not to university education (wo). Direct entry to university from school is restricted to holders of the pre-university education (vwo) certificate, with this latter group eligible to enter either wo or hbo. Table 2 shows the direct inflow into the first year of hbo, in the different sectors of hbo.

Table 2 Qualification of students entering the first year in hbo (1994/1995)

inflow from:		hbo sectors:				
		technical education	commercial education	teacher education	other	total
havo	39%	25%	26%	26%	24%	100%
mbo	39%	37%	36%	10%	17%	100%
vwo	22%	28%	45%	10%	17%	100%
total	100%					

CBS, 1995 (cohort study)

These figures show that students from the vocational track still form a minority in hbo. On the other hand, the number of mbo graduates transferring to hbo increased from 5,500 in 1985 to 15,500 in 1994. While the number of students from general education entering hbo has stabilised at around 25,000. This implies that during the last fifteen years mbo graduates have become more and more important for hbo schools.

In Figure 1 the education route followed by mbo students entering hbo is presented. These data are drawn from studies by the Research Centre for Education and Labour Market (ROA), which since the beginning of the nineties periodically publishes the results of a large-scale survey among school leavers from full time education. The main purpose of this survey² is to gain information on the destination of school leavers, whether they are in further education or in the labour market, and the interface between education and labour market or further study.

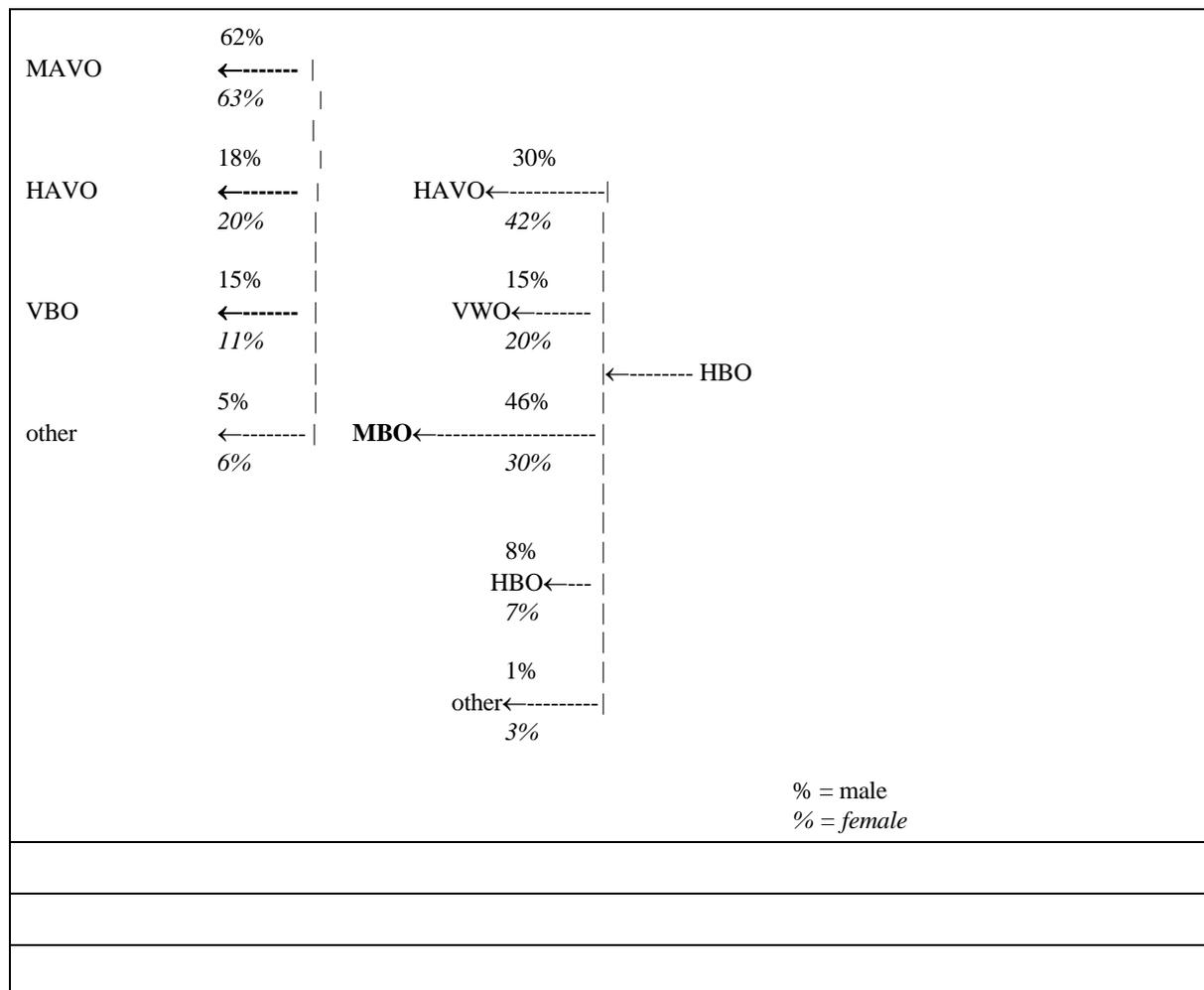
Most mbo students continuing education in hbo, started their mbo career after graduation in mavo (junior general secondary education). About 20% followed a track that is regarded as an indirect route, moving from senior general education to senior vocational education before progressing to higher vocational education: havo-mbo-hbo. Apparently mbo students with general education backgrounds have better chances for progression into hbo, than students with vocational education backgrounds. However, the transfer rates of mbo students with vocational education backgrounds should not be underestimated. The status of vbo (pre-vocational education) is very low and vbo is regarded as an alternative only for those students who are considered not able to participate in general education. Despite this more than 10% of these 'low achievers' appear to end up in hbo eventually.

double qualification courses, giving access to both hbo and the labour market, while mbo qualifications at level III (professional training) which do not give access to higher education are not. Exceptions have been made for a few courses at level III.

²

This survey is called RUBS: registration of outflow and destination of school leavers.

Figure 1: progression routes of students making mbo:hbo transitions



source: Schoolverlaters tussen onderwijs en arbeidsmarkt 1996, ROA, Maastricht, 1997.

Statistical analysis indicates that female students, students who are older and students who started in vbo, are those mbo students least likely transfer to transfer to hbo (Roeleveld & Babeliowsky, 1996). The number of weeks spent on practical training has no apparent effect on the likelihood of progression to hbo, nor does the existence of vocational guidance activities on opportunities for further study. Students who had made plans to proceed to further education at the start of their mbo career, and those who think financial rewards from further education will be higher, tend to be those most likely to transfer to hbo.

Already at the start of their mbo school career, many students intend to acquire an hbo diploma. About 50% of all mbo students originally from vbo and mavo, and about 20% of students originally from havo, intend to continue education in hbo after mbo graduation (Roeleveld & Babeliowsky, 1996). Moerkamp & Volman (1997) notice, on the basis of these data, that double qualifications make mbo an attractive educational route, in many respects equivalent to havo.

4 Success rates of mbo graduates in hbo

Table 3 differentiates between students entering hbo with an havo, vwo or mbo-diploma. In general, the success rate of mbo graduates transferring to hbo is more or less the same as those progressing from havo. However, differences exist between sectors: mbo-students from long technical courses having a higher success rate than mbo-students from commercial/administrative services or social services. Moreover, mbo-students from the technical sector show better results in the hbo-technical courses compared to havo-students.

Table 3 Output after two years of hbo (percentage students that finished propaedeutic courses)

	technical	commercial education	teacher education	other	total
havo after:					
1 year	46%	40%	69%	70%	57%
2 years	73%	59%	74%	77%	74%
mbo after:					
1 year	64%	45%	60%	66%	58%
2 years	79%	64%	67%	76%	74%
vwo after:					
1 year	72%	68%	70%	74%	73%
2 years	86%	80%	72%	80%	85%

CBS, 1995 (based on a cohort-study)

Table 4 shows the drop-out rates of havo- and mbo-students after having spent two years in hbo-courses (without finishing the propaedeutic course). Especially the sector 'commercial education' shows rather high drop-out rates. Overall havo-students tend to have lower drop-out-rates than mbo-students. The drop-out rate of vwo-students is even lower: just 10%. Unsuccessful mbo students (in hbo) tend to discontinue their hbo careers, while unsuccessful havo students try to make a fresh start in another hbo course. In this respect mbo students 'suffer' from the consequences of having made an occupational choice at an early stage of their school career.

Table 4 Drop-out of havo- and mbo-students after two years in hbo

	technical	commercial	teacher training/other studies	total
havo	11%	24%	16%	17%
mbo	14%	28%	20%	20%

CBS, 1995 (based on cohort-study)

5 Mbo attainment targets and hbo entry requirements

The first goal of mbo courses is qualifying students for the labour market. Procedures that are followed in order to design the mbo curricula reflect this priority. The business community and education together are responsible for the development of job-profiles and attainment targets. As a result of this method mbo courses are much more competency based than they were five years ago. The government no longer decides on subjects and issues tables indicating the

number of lessons per subject. (They used to do this five years ago.) The only guidelines for schools are the attainment targets. These attainment targets are developed by national vocational education bodies, but are approved by the government. The attainment targets should reflect the three main goals of mbo³:

- qualifying for the labour market
- qualifying for good citizenship
- qualifying for further study (in higher education).

The chosen procedure for developing mbo curricula proved to be a good one for the development of attainment targets referring to the first goal (qualifying for the labour market). However, the procedure appeared not to match the second and third goals. Some people say that mbo courses are much more 'vocational' than they used to be a few years ago. This development gives cause for concern, particularly for teachers of Dutch and foreign languages. More than 60% of these teachers think that the status and position of language teaching has worsened during the last five years. About one third hold the opinion that the relationship between mbo and hbo with regard to language teaching is unsatisfactory (Van Gelderen & Oostdam, 1996).

The attainment targets appropriate for further study in higher education have been developed by following a temporary procedure. These targets have been drawn up by a project group of mbo and hbo experts. Hbo has formulated requirements for entry to higher education, mostly deduced from havo entry requirements. The hbo requirements are remarkably 'study oriented' rather than 'occupation oriented'. Hbo transfer programmes in mbo courses are optional modules. The purpose of these modules is supporting students' progression to hbo. However, all mbo graduates at level IV, not only those who followed hbo transfer programmes, are entitled to enter hbo courses.

As part of this study exit qualification documents have been analysed in three occupational sectors: technical (electrical engineering, mechanical engineering), social services and welfare work, and economic/administrative (business administration, public administration). In the technical courses (T-courses), and the courses in the economic/administrative sector (EA-courses), attainment targets have been formulated with specific regard to progression into hbo. With regard to the courses in the social services and welfare sector (S-courses), no hbo transfer programme has been distinguished. The documents with regard to the S-courses only recognise that diplomas of these courses formally entitle students to continue their study in hbo. A second remark with regard to hbo progression in this document is that schools have the possibility to use the unprescribed part of the curriculum (20% of total teaching time) to pay more attention to programmes aimed at supporting progression.

The EA-courses give their students the opportunity to follow a transfer programme. This module is one of six modules of which students should choose two. Transfer modules 'compete' with modules like another foreign language, or specific domain related subjects. The transfer module covers about 5% of the total teaching time. Students study (extra) maths, English language, economic studies, accountancy studies, and social studies. The T-courses follow a similar model to the EA-courses. Students have the possibility to choose a transfer programme.

³ Although mbo is commonly seen as double qualifying, in fact mbo is triple qualifying.

Transfer modules within the electrical engineering courses for instance 'compete' with modules in training business skills and commercial skills. The transfer module in the T-courses covers about 9% of the total teaching time. The documents with regard to the T-courses explicitly stress that the whole curriculum, including purely vocational parts, prepare students for progression into hbo. In other words, these T-courses claim a real double qualifying status. Students who prefer to do a transfer module within the T-courses study (extra) Dutch and English language, maths and physics.

6 Skills to be successful in higher education according to mbo and hbo teachers

In this section skills of mbo graduates are discussed from the perspective of teachers in mbo and hbo schools. Van Gennip et al (1995) explored the relevance of the mbo curriculum for further study in hbo. They questioned teachers of 20 mbo and 16 hbo schools. The first question was: which parts of the mbo curriculum are highly relevant in order to be successful in hbo, according to mbo teachers? Overall, mbo teachers consider between 20% and 90% of the curriculum to be relevant for hbo. There is much variation between respondents, schools and courses. This indicates the problems respondents have with the concept 'relevant for hbo study'. Some of them are adamant that the mbo curriculum has almost a 100% relevance for continued study in hbo.

The study also distinguishes teachers' perceptions of the value of general subjects and vocational subjects. The researchers expected general subjects to be considered more relevant than vocational subjects. The research results, however, did not confirm these expectations. Some general subjects were considered relevant, but others were not. There seems to be a consensus about the value of the Dutch language, foreign languages and computer science. But, in the opinion of mbo teachers, subjects like social studies, social skills, physical education and art education merely contribute to the second goal (citizenship and general education). Whereas some vocational subjects are regarded as highly relevant for hbo: in some instances all respondents acknowledged their value.

According to mbo teachers of engineering courses maths and science are considered highly relevant (100%) for technological studies in higher education, as are vocational subjects like electrical engineering, digital techniques, and hardware architecture. General subjects such as social studies and foreign languages are, in their opinion, less relevant. Teachers in business studies consider subjects such as marketing studies and accountancy studies are 100% relevant, whereas social studies and foreign languages are perceived as less relevant for higher education. The researchers conclude that general subjects are certainly not regarded as 100% relevant for higher education, whereas on the other hand some vocational subjects are considered as highly relevant for both higher education and the labour market. In other words, these vocational subjects are, in the opinion of mbo teachers, dual oriented. This opinion was verified with hbo teachers. Some of them did not respond to this question because they find it difficult to form their opinion just on the bases of subject names and study hours, instead of subject content and the curriculum. However, the opinion of hbo teachers who did respond is remarkable, because they stress the value of general subjects like foreign languages and social studies much more than their colleagues in mbo, and in some cases they regard vocational subjects as irrelevant.

A second question in the study of Van Gennip et al (1995) was: what are the strengths and weaknesses of mbo students who continue their study in hbo, according to mbo and hbo teachers? Apparently there is consensus between mbo teachers and hbo teachers with regard to the strong points of mbo graduates: their professional skills, motivation and knowledge of the professional domain. Table 5 summarises the opinions of the two sets of teachers with regard to their perceptions of the weaknesses of mbo graduates in hbo courses.

Table 5 Perceived weaknesses of mbo graduates, who continued their studies in higher education, according to mbo and hbo teachers

Weaknesses according to mbo teachers	Weaknesses according to hbo teachers
<ul style="list-style-type: none"> * general language skills * knowledge of mathematics and physics (respondents from technical courses) * study skills, self-discipline, self reliant learning, planning skills * responsibility (respondents from health care/social studies) * theoretical skills/ intellectual attitude * intelligence/I.Q. 	<ul style="list-style-type: none"> * language skills * knowledge of occupationally related subjects (e.g. economics, science) * general knowledge * study skills, self reliant learning * strategic skills, vision * critical attitude toward professional practice * ability to integrate theory and practice * intellectual skills/theoretical skills

Overall, there seems to be more or less a consensus on the weaknesses too. Summarising, the main weaknesses are perceived to relate to: knowledge of occupationally related subjects, language skills, study skills and attitudes, and meta-cognitive skills (and attitudes).

Moerkamp and Volman (1997) studied the relationship between mbo and hbo, mainly from a policy perspective. They also carried out a few case studies in which mbo and hbo teachers were questioned about problems mbo graduates experience in hbo. Their findings roughly correspond with the findings of Van Gennip et al (1995). Although some teachers could not think of any problems, as they pointed out that mbo graduates perform as well or even better than hbo graduates, others listed problems that are very similar to those outlined in Table 5. According to teachers in mbo as well as hbo, mbo graduates are hard workers. They are used to studying hard and seriously, but they are less able to work independently, without instructions and direction from their teachers. They are more dependent upon direct instructions and teacher support. Some teachers in mbo pointed out though that there has been a recent shift in mbo courses towards self reliant learning, problem based learning and 'open' learning. This shift might improve the performances of mbo graduates in hbo.

With regard to language skills, problems seems to occur in particular with respect to close reading, understanding and analysing texts. In relation to knowledge in specific occupational subjects, teachers not only observe that mbo graduates have a lack in the depth of their knowledge at the start of their hbo courses, but also that they seem to have problems in acquiring new knowledge during their hbo study. Most of the problems teachers observe are related to meta-cognitive skills. Mbo teachers and hbo teachers, however, do not always agree on the implications of this for the hbo curriculum. For instance, an hbo teacher expects the

students to fit the curriculum, and criticises mbo graduates: *"mbo graduates are very pragmatic. They are used to applying standard methods, without evaluation and sense of innovative methods. They have more technical skills, but they are not 'open minded' in applying and developing new skills."* However, in an mbo teacher's opinion the hbo curriculum needs changing, as it is not challenging enough for former mbo students in a different way: *"these students need more action and practice oriented learning instead of books and theory."*

Another hbo teacher not only refers to different cognitive styles mbo graduates obviously have compared to havo students, but also to the relationship between these different styles and the social background of students: *"many mbo students are from families that are not used to a more theoretical and intellectual way of thinking. And in mbo schools this type of thinking is not developed. Mbo schools pretend to teach theories and to develop theoretical thinking. But in practice they are focused on repetition and recall."*

From August 1998 for mbo graduates the 4-year hbo programmes will be reduced to 3-year programmes⁴. This seems to be contrary to the experiences of mbo graduates in hbo according to the expressed opinions of hbo teachers. Many hbo schools are not very content with the proposed reduction. Therefore hbo courses in the technical sector together investigated the problems that (will) occur for mbo graduates in 3-year programmes. In this research project respondents from hbo schools (technical sector) were questioned about their experiences with mbo graduates in hbo courses (KPMG, 1997). One of the outcomes of this questionnaire was that in the opinion of hbo teachers mbo graduates have particular difficulties in hbo courses. Although mbo graduates themselves often feel that hbo courses, in particular the first year, in many aspects repeat what they already learned in mbo, hbo teachers think that this is only the case with respect to a small part of the programme. In particular, with respect to technical skills and knowledge in the professional domain, mbo graduates are ahead compared to graduates of general education. On the other hand, hbo teachers observe weaknesses in the knowledge and skills of mbo graduates with regard to: study skills, language skills, and theoretical/analytical thinking. The consequence of these problems was that students who started in (experimental) 3-year courses, switched to the 4-year routes during their hbo school career.

7 Conclusions on mbo:hbo progression

In general the level of performance of mbo graduates in hbo seems to be comparable to that achieved by havo graduates, but significantly below that achieved by students from the academic pathway (vwo graduates). However, mbo graduates tend to drop out more often than havo graduates, and while havo graduates discontinuing their first course of hbo study are likely to switch to another hbo course, mbo students are more likely to discontinue their hbo studies altogether. Hence drop out of the hbo system as a whole is largely a distinctive problem of mbo graduates.

⁴ The main reason for this reduction is the increasing number of mbo students who continue education in hbo. The mbo-hbo pathway is regarded (by the Government) as a rather expensive option, because the complete track covers 11-12 years, while the havo-hbo pathway takes 9 years. The policy with regard to mbo-hbo relationships has been discussed in more detail in the Inequal national case study (Moerkamp & Voncken, 1996).

The data about success and failure of mbo graduates in hbo are based on the performances of mbo cohorts that transferred to hbo in a situation in which not much specific attention was paid to mbo-hbo progression. Most mbo courses offered specific transfer programmes, but more systematic action with regard attainment targets, entry requirements, and mutual arrangements between mbo and hbo, have only recently come into force. The first mbo cohort that will graduate under the new attainment targets will enter hbo in the year 2000. The same applies to educational innovation strategies in mbo. Mbo schools recently started to apply new teaching methods like problem based learning, project learning, and open learning. These methods might result in a better fit between mbo and hbo in future.

Some teachers in hbo are rather negative about mbo graduates. (It is difficult to reach a more definitive conclusion as, unfortunately, we only have results from small scale studies.) Their critique seems to concentrate on a set of poorly developed skills that could be summarised as 'meta-cognitive', but they also identify problems with regard to language skills and core skills in domain related subjects. One fascinating detail is that hbo teachers expressed the same feelings about havo graduates about ten years ago when the havo-hbo relationship was under discussion. There is likely to be an element of truth in the hbo teachers' complaints about the meta-cognitive skills of mbo graduates. On the other hand, as vocational pathways mbo and hbo struggle for status and recognition and, although they would never say this in public, it may be that some hbo teachers fear a decline in their status when too many mbo students enter hbo.

Discussion about the mbo:hbo relations has been concentrated on meta-cognition, core skills and so on. Remarkably, not much attention has been paid to the development of vocational skills and knowledge, although it is unlikely that mbo graduates could not benefit from their advantage with respect to these skills. There are a few possible 'explanations' for this: hbo is very focused on students of the general track, and is used to students who are still open minded towards selection of a particular vocational domain; hbo still is very 'academic' (and is more interested in trying to relate to university than to mbo); and hbo fears a loss of status and position if it focuses even more on vocational skills.

We might conclude that mbo has been fairly successful in preparing students for hbo, under conditions in which preparing students for the labour market had had the highest priority. So there is perhaps a danger that paying too much attention to hbo progression might compromise the effectiveness of mbo as a genuinely double qualification, in which it was unnecessary to differentiate students in advance according to whether they were aiming at HE or the labour market. Further hbo itself is still very 'academic' (and more interested in trying to relate to university than to mbo), and giving hbo a more genuinely vocational emphasis might be another way of bridging the mbo:hbo transition (unpalatable though this may be to status conscious hbo staff, rather than always seeking to make mbo more academic).

8 Context: development and expansion of GNVQs in England

Earlier work on the INTEQUAL project (Brown, 1996; Manning, ed 1996) gives a fuller picture of the introduction and implementation of GNVQs. The current English framework

of post-compulsory and pre-higher education qualifications comprises three major pathways. The traditional academic A level route was established in 1951. The expressly vocational pathway, leading to National Vocational Qualifications (NVQs), was introduced in 1987. The third pathway, involving programmes based on GNVQs, was introduced in 1992 and is intended to straddle academic and vocational traditions. Since the launch of pilot programmes in five vocational areas in 1992/93 GNVQs have proved popular with young people, and their introduction has been welcomed by many schools and colleges (Ofsted, 1994). GNVQs now cover 14 subjects at three levels, and the size of the total cohort taking GNVQs has increased from 10,000 in 1993 to 240,000 in 1996 (Oates, 1996).

Recruitment to Advanced GNVQ programmes has expanded rapidly, and currently covers about 17% of the age cohort. Informal predictions are that the numbers taking Advanced GNVQ programmes may in the medium term stabilise at around 20% of the age cohort: a figure much less than the 50% whom it was initially thought might eventually take such programmes. One reason for this is that, while the major target group for full-time Advanced GNVQ programmes was those with four or more GCSE passes at grades A* to C, in practice the overwhelming majority of those with five or more GCSE passes at grades A* to C opt for A level provision (Brown, 1996).

Hence the de facto recruitment range is rather restricted, although many centres stated entry requirements are not always met in practice. While most entrants to Advanced GNVQ programmes come from GCSE programmes at age 16, some progress via the one year Intermediate GNVQ programmes. Recruitment then has been reasonably buoyant, but retention and completion have been much more problematic (Spours, 1995). Of the 1996 cohort fewer than 60% of the 53,527 Advanced GNVQ candidates received the full award (UCAS, 1996a). [It would be relatively rare for those with less than a full award to proceed directly to higher education].

9 Extent to which GNVQ does have a genuine dual orientation towards HE and the labour market

GNVQ was expressly intended to provide the skills, knowledge and understanding of a vocational area so as to provide opportunities for progression into employment or further learning. The Advanced GNVQ is designed for entrance into higher education or employment, and so is a qualification with a vocational emphasis but a dual prospective orientation. However, many colleges drew heavily upon the traditions associated with existing pre-vocational and vocational qualifications (Spours, 1995), and saw the programmes as direct replacements for existing programmes, particularly BTEC National Diplomas (FEU, 1994), which themselves had become increasingly oriented towards progression into higher education rather than employment. For example, in 1992 almost 60% of those completing National Diploma programmes subsequently went into higher education (BTEC, 1993). This orientation towards progression within the education system was reinforced by the many schools and sixth forms that took up GNVQ as a new venture. Overall, a majority of Advanced GNVQ students too viewed progression primarily in terms of progression to higher education or other forms of education and training (FEU, 1994).

In an important sense then GNVQ programmes were being viewed as applied general education, with the vocational orientation being downplayed (Brown, 1996). There were, however, some dissenting voices uneasy about this drift and who argued that GNVQs should have a more explicit vocational emphasis (Spours, 1995). Business and industry representatives too expressed reservations that GNVQs were not more oriented towards employment, and in particular they were concerned that GNVQs were not adequately supporting NVQs (Dearing, 1996). The Dearing Review suggested a compromise whereby: “additional units should be developed to extend the choice of units available to GNVQ students so that they and others can direct their studies more closely to particular NVQs and build up the required knowledge and understanding underpinning the NVQs” (Dearing 1996, p24). Additional units, however, remain outside the central GNVQ framework, and students would need to choose these specifically in order to get a stronger vocational emphasis.

Overall then, Advanced GNVQ programmes in practice are generally focused upon facilitating entry into higher education, while also acting as a broad general preparation for employment. Hence GNVQ could be viewed as having a pre-vocational rather than a vocational emphasis. GNVQ appears to have carved out a niche as ‘applied general education’, mainly for full-time students, with an orientation for the most part towards further education and training, rather than being directed towards particular forms of employment. Indeed the lack of a more explicit vocational emphasis has left room for one of the national awarding bodies (BTEC) to retain a number of its National Diploma and National Certificate programmes, that it was originally thought would be replaced by GNVQ. The much more widespread take-up of GNVQ in schools and sixth form colleges than previous qualifications in this area has reinforced perceptions of GNVQ as applied general education, although of lower status than the A level route.

10 Progression to higher education from GNVQ in context

Progression prospects for entry into HE have been generally quite good for those who successfully complete Advanced GNVQ programmes, with over 90% of the approximately 20,000 1996 applicants being offered a place in HE (UCAS 1996a). Most GNVQ applicants apply for courses in related subject areas, but there is variation in their prospects of getting the subject and/or institution of their choice according to vocational area; desired HE programme and type and number of additional units and/or qualifications undertaken (UCAS, 1996b). However, it should be borne in mind that large numbers of students failed to complete the Advanced GNVQ programme within two years (Spours, 1995 UCAS 1996a;), and that in 1995, slightly less than half the Advanced GNVQ cohort applied for HE through the national Universities and Colleges Admission Scheme (UCAS, 1996b). Over half (52% or 10,223 applicants) the GNVQ students applying to HE in 1996 came from the Business subject area, although applications from other subject areas have been increasing as they have become more widely available (UCAS, 1996a).

Some programmes in HE have teaching styles and assessment techniques which make transition from GNVQ smoother than others. For example, former GNVQ students may find it easier to cope with project work and continuous assessment than essays and terminal

examinations. Similarly they may wish to apply to courses where there is a strong vocational emphasis and/or where tutors are used to working with students from vocational routes. Some schools and colleges and HE institutions have formalised links through HE compacts, where progression to a particular HE institution is signalled as a strong possibility (or even a guarantee if certain conditions are met) from the outset of the Advanced GNVQ programme. Students may link to the HE institution in a number of ways during the course of their GNVQ study. Such links place the emphasis on individual and curricular progression, and may diminish the extent to which the transition to HE is seen as a sharp structural 'break'. These issues will be discussed in greater detail below, but first it may be appropriate to outline some views of HE admissions tutors on how well GNVQ acts as a preparation for HE studies.

11 HE admissions tutors views on the value of GNVQ as a preparation for higher education

Research has been carried out into the range of skills, knowledge, understanding and personal qualities admissions tutors believe are required of prospective entrants to HE (Brown and Bimrose, 1993; Boffy et al, 1993). Admissions tutors are the 'gatekeepers' of entry into HE in that it is their decisions which determine whether applicants are made an offer of a place in HE. Brown and Bimrose (1993) investigated the views of fifty admissions tutors drawn from five broad subject areas, including two which had significant numbers of applicants from vocational education pathways: business studies and engineering. Boffy et al (1993) interviewed ten admissions tutors, including two each from business studies and engineering, in search of what they regarded as threshold competencies for entry into HE.

Business studies is a highly popular subject and one where a large numbers of applicants come from vocational as well as academic routes. Admissions tutors were looking for a balance between academic and other skills. They invariably wanted candidates to be numerate and to possess a high standard of written English. They also emphasised the importance of factors such as commitment, interest and motivation; communication skills; ability to study and get to grips with abstract ideas; management of own learning; maturity and independence; relevant work experience; and understanding the nature of the course when looking at the qualities of applicants (Germon and Lagro, 1993). Applicants from vocational education were seen as "different" from those from the academic (A level) route.

How this difference was interpreted varied. Some applied a simple "deficit model" where they expected such students were more likely to struggle with the academic approach used in degree study, particularly if they were not used to exams and their mathematical skills were not sufficiently well developed (Brown and Bimrose, 1993, but the same point is made in UCAS, 1996a). Others argued that such students came from a different "learning culture", but that they too had advantages: better able to work as a member of a team, more used to independent learning and project work. In the latter case, reviewing induction procedures and curriculum design more generally could make a much smoother progression for those from vocational routes. Those admissions tutors with fewer applicants to choose from were much more likely to adopt the broader view. Some admissions tutors acknowledged that, although in an ideal world careful thought should be given to the articulation of different patterns of experience prior to entry to the degree programme itself, expediency could drive admission practices in the opposite

direction. If a group had a largely homogeneous background, then not only might this make the admissions process much easier (those with high academic grades coupled with exceptional candidates from other routes), but it might also improve retention rates and mean fewer demands for remediation and additional support are made upon teaching staff.

Engineering courses had mixed popularity according to their specialism, although overall there was a shortage of applicants for engineering. There is a strong tradition of applicants from vocational as well as academic routes. Academic performance was generally seen as decisive for applicants from either route (Brown and Bimrose, 1993). The dearth of well qualified candidates meant that admissions tutors were likely to be looking at personal qualities, motivation and practical experience as "reasons to accept" rather than them being used as a screen to reduce the number of acceptable candidates. Admissions tutors were particularly likely to be concerned about whether the underpinning knowledge of scientific and mathematical principles was sufficiently well-developed among GNVQ candidates (UCAS, 1996a). Some departments offered an additional foundation year for those without recent or appropriate qualifications. This was seen as evidence by one admissions tutor that "we can draw from a wider base than we ever thought possible" (Germon and Lagro, 1993). The curriculum delivery implications, however, were significant. The widely different starting points and needs of students meant that a variety of types of provision and support were required when resources were already stretched.

The research by Boffy et al (1993) highlighted the views of admissions tutors on the significance of academic skills, core skills, organisational skills and learner independence. Interestingly as the HE engineering programme was below degree level the admissions tutors did not regard any particular academic skills as prerequisites, rather attention was given to the development of skills such as the ability to research, handle abstractions, and apply scientific principles within the HE programme itself. In this case the curricular links between this programme and GNVQ provision were particularly strong: emphasis being given to organisational skills; written and oral communications; practical approaches to problem-solving; and learner independence. The business studies admissions tutors saw students from vocational education as having certain advantages in relation to their experience of group-work, and the emphasis given to written and oral communication skills. However, because entry to the course was competitive, the admissions tutors were also able to specify quite high levels of academic achievement too, and this ruled out many applicants from vocational education pathways. The area in which former GNVQ students often had the most difficulty was with Quantitative Techniques (Boffy et al, 1993; UCAS, 1996a).

The overall attitude of admissions tutors towards GNVQ applicants was often mixed. The emphasis given to 'independent learning' skills was seen as in tune with the scale of independent learning now required on many HE programmes. The students' experience of the key skill areas of communication and information technology were also perceived as valuable, and an area in which they sometimes had important advantages over many of their GCE A Level counterparts (UCAS, 1996a). However, admissions tutors also had reservations about aspects of the experience of former GNVQ students, compared to students coming from the traditional (GCE A Level) academic pathway. These concerns related to

their lack of experience with writing essays and taking examinations, and doubts whether they had sufficient depth of knowledge for particular HE courses (UCAS, 1996a).

Advanced GNVQ students had very different experiences about what type of writing they had been asked to do as part of their course. They had invariably been asked to produce reports, but teachers' interpretations of what was required varied in relation both to content and style: some asked for purely descriptive reports, while others requested a more analytical approach, and the type of report required varied from brief synopses to major dissertations. As a consequence some students lacked experience and confidence when they found they were expected to produce essays in their degree programmes, although "those who had completed more detailed analytical reports were better able to cope with HE" (p20, UCAS 1996a).

The lack of experience of examinations was unfortunate in that it was going against the trend within HE towards more use of exams. On the other hand, "many students had opted for GNVQ courses because of the greater emphasis on continuous assessment" (p 21, UCAS 1996a). Students only experience of external testing within GNVQ was of multiple-choice tests. A small minority of students may have had experience of examinations in their additional (GCE A or AS level) studies (FEDA, 1995), and others regretted not having overcome their examination fears prior to entering HE, but others felt that it was HE that had the wrong emphasis in placing so much importance on success in unseen three-hour examinations (UCAS, 1996a).

The major concern of admissions tutors in subject areas where HE programmes made significant implicit or explicit assumptions about prior academic knowledge was whether Advanced GNVQ students had sufficient depth of knowledge prior to entry to HE. This was particularly likely to be a problem for those students entering HE programmes with a high scientific or mathematical content, since "unless they have fully mastered certain scientific or mathematical principles they struggle on some degree courses" (p20, UCAS 1996a).

12 Facilitating GNVQ:HE transitions

Those Advanced GNVQ students who are successful on their programmes stand a good chance of getting into HE, but they are faced with two potential problems in negotiating their transition through to being a successful student in HE. First, they may feel there is a degree of prejudice against them when higher education institutions make offers of places (UCAS, 1996a). Second, they run the risk that they may subsequently drop out of their HE programme fairly early in their studies. To some extent this may be because they feel academically under-prepared in some respects (UCAS, 1996a), but, as with other students who do not follow the main academic (A level) pathway into HE, they may be at a relative disadvantage just because they are not from the dominant pathway (Brown, 1994). Hence there is a need to take action to try to facilitate smooth GNVQ:HE transitions. The following sub-sections outline some of the actions which can be taken to achieve that goal.

12.1 Addressing the 'fit' between GNVQ programmes and HE curricula

One key element in the successful transition between GNVQ and HE is likely to be the degree of 'fit' between the two curricula. Some of the elements within an HE curriculum which may increase the likelihood of successful transition could be:

- a continuing emphasis on the development of key (transferable) skills
- small group work
- clear guidelines for the pacing of work
- a practical orientation to curriculum delivery, with a focus on problem-solving, coupled with active participation
- differentiation of the first year curriculum to build on the strengths and counter the weaknesses of those from different routes and with different patterns of experience
- availability of a foundation year for those requiring additional development in particular subject areas
- use of a range of assessment techniques
- student control of the learning process.

Conversely some courses may have not only teaching styles and assessment techniques which would make transition from GNVQ problematic, but the culture as a whole, including attitudes of staff and students, may be inimical to a successful transition from GNVQ (for example, where the prime teaching goal would appear to be a preparation for a career in research). Indeed HE institutions may become more diverse in their goals and purposes, (including some institutions having an even stronger research orientation), which will make the issue of 'fit' between pre-HE and HE curricula increasingly important.

The curricular 'fit' between GNVQs and HE is much better for some HE courses and institutions than others. So prospective HE entrants from GNVQ should be made aware of the possible importance of seeking to ensure curricular 'fit' between their pre-HE and HE programmes. Some HE curricula continue to be organised around full-time attendance, terminal examinations and in-depth study of a single subject. Admissions tutors of such courses may stress not only the ability to handle abstractions, but also the ability to handle curriculum overload. Indeed some unlikely courses (theatre studies?) are framed in such an unashamedly 'academic' way, that they seem expressly designed to 'fit' the curricular experiences of 'good' A level students. In this sense it is perhaps as well to acknowledge that the unreformed HE curriculum sometimes reflects a wish to be 'exclusive': the privileging of A level candidates being an intended rather than an unintended consequence. Applicants from other routes, including GNVQ, should, therefore, be aware that in many senses they may be 'on their own' if they apply to such courses.

Another approach to achieving a better curricular 'fit' comes from adapting the pre-HE curriculum, particularly in relation to the optional and additional units chosen from within GNVQ, and the additional studies which can be undertaken alongside it. Additional units are being developed with the explicit intention of trying to ensure that students can develop the greater depth of understanding required as a prerequisite to entry into a number of HE programmes (UCAS, 1996a). GNVQ was designed so there was also scope to take additional studies, for example an A or AS level (the latter Advanced Supplementary level being broadly equivalent to half an A level), and this may be another means of getting the more substantive

depth of understanding required to start on specific HE courses. Although in practice only a small minority of GNVQ students also opted to do an A level (FEU, 1994; FEDA, 1995).

12.2 Importance of GNVQ:HE compacts

Much of the foregoing argument about how to increase the chances of those completing GNVQ programmes going into HE could be linked to the use of compacts (or other link arrangements) between providers of pre-HE and HE curricula. The advantages are legion. The involvement of HE staff in the design (and the delivery) of the pre-HE programme as a whole can improve commitment and motivation of the young people. It can act to change perceptions; in particular, once there is the realisation that HE is a genuine possibility for them. That is, HE is not viewed as a remote possibility for other people from this route, but as a clear possible progression route for them from the outset.

The involvement with HE could take many forms: links into the HE programme through project work, 'guest' lectures or workshops, 'taster' days or residentials, shadowing HE students and so on. Student tutoring has also been used: where HE students go into schools to act as tutors to support pre-HE teaching. Such involvement can help prospective entrants get a much clearer picture of the links between pre-HE and HE curricula. At the same time, teachers may then have a clearer understanding of how they can support their students to enhance the likelihood of subsequent success in HE. The use of joint review procedures may be particularly useful in this regard.

The establishment of such links may mean that progression is geared to particular HE programmes and institutions, which are likely to be strongest within immediate localities or regions. The formalisation of such links through GNVQ:HE compacts may be thought to delimit choice (in a way that possession of three 'good' A levels does not). However, if the emphasis is upon **progression**, rather than gaining a generalised 'HE admissions ticket', then the linking of schools and colleges with HE becomes much more acceptable. Indeed the benefits such as the increased opportunities for franchising, foundation year support, part-time study, agreement over guaranteed 'straight through' progression routes means that ultimate success in HE is much more likely. Direct exposure to the HE culture can also help students clarify their expectations.

GNVQ would seem an ideal programme to fit into the burgeoning schools and colleges HE link schemes. Besides the advantages in terms of broadening access of developing more local links (because of finance, flexibility of attendance, more clearly defined progression routes), it allows a dialogue between admissions tutors and schools and colleges about the criteria for entry and expectations of entrants. This delineation of criteria and expectations would also be hugely advantageous to prospective applicants. The only apparent disadvantage of 'locking in' into regionalised HE provision would be that it might be thought to involve giving up 'automatic' rights of entry on a national basis. However, in practice entry into highly popular programmes with national entry fall into two types. Either those which make judgements upon the quality of the case made for entry (through interview, presentation of a portfolio of work and so on) or those which rely almost exclusively upon high levels of academic achievement. Entry to the former would still be possible through a GNVQ route and so would entry to the latter, although applications would likely require a special case to be made in the application, if there are relatively few applicants from a GNVQ route.

13 An Anglo-Dutch comparison of progression to higher education from school-based vocational education pathways

Diploma holders from long (three or four year) mbo courses have the right to enter higher vocational education, although completion of mbo does not confer any right to enter university (wo), just the higher vocational colleges (hbo). In the English system, possession of an advanced GNVQ is increasingly recognised by higher education institutions (colleges and universities) as an acceptable entrance qualification. However, within English colleges of higher education and universities admissions decisions are largely decentralised, with the consequence that individuals will be told whether their qualifications (and possibly their performance on other aspects of the admissions process) are sufficient to get them onto particular programmes of study. In theory then, after GNVQ, students could apply for a very wide range of subjects in any HE institution. In practice, holders of the Advanced GNVQ have in the main applied for HE programmes, with a vocational emphasis, in the 'new' universities (those that until 1992 were polytechnics). Overall then, those going into HE after completing GNVQ or mbo enter similar types of programmes in practice, even if the English students have a wider range of programmes and institutions from which to choose.

In both countries students with a vocational education background are more likely to drop out of HE than those coming from general education. Within vocational education in both systems, however, steps can be taken that increase the likelihood of students being successful when they move into higher education. These include partnership or compact arrangements between institutions from the two sectors, either at a local or regional level. Such partnerships being set up with the explicit intention of facilitating the transition from mbo to hbo, or from GNVQ to HE.

In addition to institutional links between sectors to facilitate transition, in both countries it is possible for individuals to take enriched or enhanced mbo or GNVQ programmes that can greatly affect their chances of being successful in HE. In mbo students have the right to transfer to hbo if at least 1,600 curricular hours in mbo are relevant for the proposed transfer to hbo. [Note the 1,600 relevant curricular hours have to be drawn from a total of 4,800 hours for a three year course, and 6,400 hours for a four year course.] However, students can take extra subjects offered in the optional component of the curriculum, as part of an enrichment programme, specifically aimed at facilitating hbo transfer. This almost exactly mirrors the situation with GNVQ, where judicious choice of optional units and, more particularly, additional units or studies can mean that a student is much better prepared to undertake their chosen course of study in HE.

While GNVQ can gain you entry to HE, the more substantive mbo qualification can give you advanced standing within hbo. That is, if the transfer from mbo was to a domain-related area of higher education, then your mbo study can be regarded as equivalent to 42 credits out of a total of 168 credits. The effect of this is that you could complete your hbo in three years, whereas if your mbo study was not domain-related then it would require a further four years of hbo study.

In both countries HE institutions would like to see the vocational pathway strengthened academically in order to ease transition into and through HE (Brown, Moerkamp & Voncken, 1997). The evidence presented in previous sections showed that staff in vocational education and in higher education have a range of concerns about how well students are prepared for HE from school-based vocational education pathways. Interestingly, the problems with transitions to HE of the students from full-time school-based vocational pathways in the two countries appear, in some respects at least, as almost mirror images.

In the Netherlands, the strong vocational orientation, with a clear focus upon entry into the labour market, and early specialisation within mbo, can create particular problems. For example, if mbo graduates in hbo found they did not like and/or were not successful in hbo, then they were very much more likely than other students to leave HE altogether. While vocational skills were strongly developed, staff thought mbo graduates had weaknesses in their language skills, study skills and meta-cognitive skills, as well as an underdeveloped knowledge base of underpinning academic knowledge in areas such as mathematics, science and economics.

In England, GNVQs had a much less distinct vocational orientation, being more akin to applied general education (Brown, 1996). There is debate about whether the vocational orientation should be downplayed to this extent (Spours, 1995; Dearing, 1996), but it does mean that former GNVQ students have a wider set of options for HE study than their Dutch counterparts. The attention given to generic skills like information technology; organisational skills; communication skills and so on, and the emphasis given to finding out for themselves, meant that former GNVQ were, unlike their Dutch counterparts, often seen by staff as independent learners able to work well on their own. There was a similarity, however, in that former GNVQ students were quite often seen by staff as disadvantaged by their lack of sufficient depth of knowledge, of underpinning principles and theory, for particular HE courses.

The challenge for the future for both mbo and GNVQ is to develop a substantive knowledge base, and a range of core skills/key qualifications linked to the ability to communicate, the ability to work as a member of a team, flexibility, a continuing commitment to learning and the like. This should give former students a solid platform from which to enter employment or higher education. One of the apparent strengths of the Dutch system is the value of having an extended vocational pathway, as compared to the academic pathway, and this could be a valuable lesson for an English system, in which the transition into, through and out of Advanced GNVQ programmes seems unduly rushed given the scale of the task to be achieved. There is an irony here though in that the Dutch government intends to shorten the overall duration of the mbo:hbo route, by reducing the standard course length of hbo for mbo graduates from four years to three. This will make it even more imperative to look for smoother curricular progression between mbo and hbo.

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