Supporting transitions to higher education by students from vocational pathways

Alan Brown Institute for Employment Research

University of Warwick

Trudy Moerkamp SCO-Kohnstamm Institute

University of Amsterdam

Eva Voncken SCO-Kohnstamm Institute

University of Amsterdam

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. The position of such students will be examined in each country, before attempting a comparative Anglo-Dutch analysis. In this paper, particular attention is given to the perceptions of the students themselves as to how their transitions to higher education (HE) could have been smoothed. A companion paper (Brown, Moerkamp and Voncken, 1997) will examine staff perceptions of the skills required by students from these pathways to be successful in HE.

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) TOTAL % * * does not add up to 100% as a small percentage continue in mbo	34	37,4	50,1	55,9	51,3
	93%	96%	93%	92%	97%

(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 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)

		hbo sectors:	hbo sectors:							
inflow from:		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.

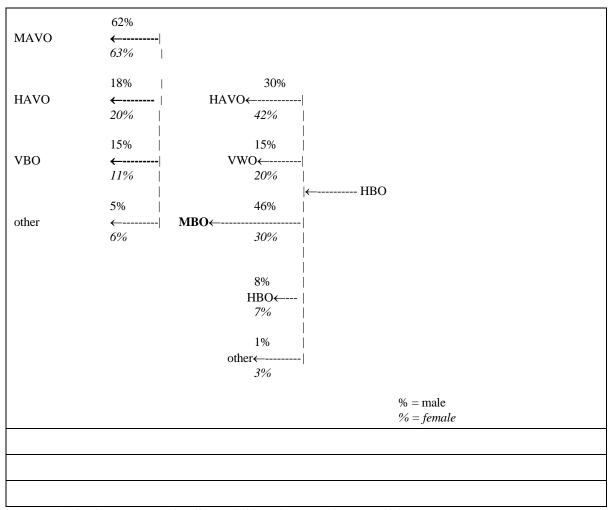
Most mbo students continuing education in hbo, started their mbo career after graduation in mavo (junior general secondary education). About 20% followed a track that is regarded as an indirect route, moving from senior general education to senior vocational education before progressing to higher vocational 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

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 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.

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

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.

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 2 years	46% 73%	40% 59%	69% 74%	70% 77%	57% 74%
mbo	after: 1 year 2 years	64% 79%	45% 64%	60% 67%	66% 76%	58% 74%
vwo	after: 1 year 2 years	72% 86%	68% 80%	70% 72%	74% 80%	73% 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.

 $^{^{3}}$ Although mbo is commonly seen as double qualifying, in fact mbo is triple qualifying.

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. 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 and competencies of mbo graduates according to mbo graduates themselves

In this section data will be analysed with respect to the skills and competencies of mbo graduates in hbo as well as in the labour market, from the perspective of the former mbo students themselves. Wherever possible, results are compared to those of havo graduates. The data in this section are mostly drawn from the school leavers survey (RUBS). In 1996 over 26.000 school leavers participated in the survey, that takes place about a year after school leaving. The majority of the school leavers either work or have entered higher education. In 1996 almost 1200 havo-school leavers participated in the survey, whereas 7400 mbo- and over 13.300 hbo school leavers were also involved. Table 5 gives some general figures on the satisfaction students express with respect to the interface from their previous course and their course in hbo.

Table 5 Students' opinions on the 'fit' between their previously completed course and further education in hbo

Percentage of students by gender and background that evaluates `fit' as `good' according to:	male	female	Dutch background	non-Dutch background	total
previous education	%	%	%	%	%
havo	18	33	26	33	26
vwo	53	69	62	-	61
mbo	38	36	38	43	38
hbo	58	59	58	56	58
total	36	43	40	32	39

Source: Rubs survey, 1996

From this table it can be concluded that the higher the level of their previous education, the more satisfied students are with the 'fit' to their current hbo course. Furthermore, female

students tend to be a little more satisfied with the interface than male students. Because mbo qualifies for work as well as for further study, it is interesting to compare the opinions of both 'groups' on the fit between mbo and work on one hand and mbo and further education on the other hand (table 6). Moreover, these data are compared to information provided by havograduates. Apparently, mbo-graduates and havo-graduates who continued education seem to somewhat more positive than those who started working. This goes for all sectors except for the agricultural and the health care sectors in which the opinion is reversed. It is remarkable that over the years, the opinion of mbo-graduates from technical courses on the fit between mbo and further education has become more positive, while the opinion of graduates in agricultural and health care studies grew less positive.

Table 6 Students' opinions on the alignment of their previous course with their current status

opinion on alignment:	alignment with fu	rther education	alignment with current job*			
	adequate/sufficient	reasonable/poor	adequate/sufficient	reasonable/poor		
havo	75% 24%		68%	32%		
mbo	78%	23%	70%	30%		
- agriculture	60%	40%	75%	24%		
- technical	82%	19%	63%	37%		
- administrative/economics	75%	25%	71%	29%		
- health care	68%	33%	73%	28%		

source: RUBS, 1996 (*= figures based on 1995)

So, overall over three quarters of the mbo- and havo-graduates find the interface between their previous study and hbo sufficient to adequate, rather than poor to reasonable. Roeleveld & Babeliowsky (1996) analysed whether students with different previous training (either havo, mbo or vwo) vary in their experiences and opinions of the first year of hbo, and a summary of student evaluations is presented in Table 7.

Table 7 Students evaluation of hbo study after one year (mean scores)

	previous education							
	havo	vwo	mbo	total				
dedication to study	5.8	6.3	5.9	5.9				
problematic interface	4.0	2.6	3.5	3.5				
satisfied with hbo-choice	6.0	6.4	6.1	6.1				
satisfied with learning environment	6.4	6.2	6.1	6.2				

Source: Roeleveld & Babeliowsky 1996

In their own opinion, former vwo-students seemed marginally more satisfied overall and perceived fewest problems in the interface between their previous education and hbo, while

mbo-students, and particularly havo-students, were more likely to view the interface between current and former study as problematic. Mbo students in the sector health care and education (not shown in the table) tend to evaluate the fit more negatively compared to students in other sectors. On the other hand, students in health care studies are the most satisfied with their hbo choice, while students of economics and language/culture are the least satisfied.

Roeleveld & Babeliowsky (1996) go on to show that, with regard to their judgement of their study skills, former vwo-students in hbo seem to value their study skills higher, havo-students lower, while mbo-students are in between. Of these three groups of students, mbo-students value themselves the highest on the topics: `being able to link theory and practice' and `paper presentations'. After the first year of hbo, 37% of mbo-graduates feel they lack knowledge in certain subjects, compared to 51% of havo-graduates and 54% of vwo-students. Mbo-students mention languages, maths, physics and economics as areas where they lack knowledge; whereas havo-students mention mainly physics and vwo-students economics and physics.

As already noted in section 4, mbo-graduates are less successful in hbo than vwo-graduates, however their results are certainly comparable to havo-graduates. In the administrative and technical courses the success rate of mbo-graduates is even higher than havo-graduates. Although mbo students are as successful as havo students, they tend to drop-out more. In Table 8 reasons for drop-out from hbo-courses, according to students own perceptions, are presented. Reasons like `chosen subjects did not match' previous study area or expectations were mentioned by only 10% of the students.

Table 8 Reasons for drop out of hbo, according to hbo students

reasons for drop out of hbo courses		female	total
- lack of motivation	32%	41%	37%
- preference for a different course	32%	38%	35%
- courses are not interesting	35%	32%	32%
- courses are too difficult	21%	22%	21%
- lack of self discipline	20%	20%	20%

Source: Rubs survey, 1996

The Rubs-data offer some insight on aspects to which, according to students, more time should be devoted, either in havo or in mbo (see Table 9). Here we only describe aspects that were mentioned by 50% or more of the graduates.

Graduates from **agricultural courses** in mbo, who have proceeded to hbo, mention several aspects, among which are computer science, foreign languages, organisational skills followed by careers guidance. Those who entered the labour market would prefer more attention to be given to knowledge of conditions of employment, computer science, organisational skills, theoretical subjects and working with machines.

Table 9: Aspects that need more attention in mbo and havo according to mbo and havo graduates

	graduates who entered the labour market				graduates who proceeded into hbo					
mbo-sector	Ac	Te	Ec	He	Havo	Ac	Te	Ec	He	Havo
Study skills	14%	14	15	14	24	25	25	27	42	29
Foreign languages	28%	30	24	36	10	50	31	23	55	16
Numeracy	22%	10	19	17	21	41	37	33	35	17
Computer science	59%	64	69	46	86	67	67	61	65	79
Self-reliant learning	32%	33	33	31	45	27	34	39	37	45
Organisational skills	50%	48	48	42	57	50	44	56	49	56
Spelling skills	16%	20	28	28	33	41	37	29	56	30
Writing reports	17%	26	39	45	54	44	45	54	54	58
Speech skills	19%	24	40	27	38	38	39	47	47	42
Communication skills (with clients)	30%	37	40	36	47	29	26	38	25	32
Careers guidance	39%	49	49	46	65	44	54	58	55	48
Interview training	35%	51	58	56	72	39	60	52	50	51
Theoretical subjects	50%	51	43	46	46	30	27	29	38	34
Practical trianing/work experience	38%	42	51	40	63	13	22	36	19	55
Working with machines	50%	55	47	38	48	31	37	33	34	46
Workplace organisation knowledge	42%	39	40	31	47	35	41	50	30	38
Knowledge about conditions of employment	61%	67	68	66	80	48	53	52	51	51
Salesmanship/commercial skills	29%	35	42	20	26	32	31	33	17	29
Co-operate with others	17%	22	21	19	47	27	25	41	26	33
Separating main issues and side issues	24%	32	29	25	31	34	28	35	37	36

Source: Rubs, Van Smoorenburg & Van der Velden, 1995

Graduates from the **technical sector**, who entered hbo, mention computer science, interview training/application training, careers guidance and knowledge of conditions of employment. Those who have a job mention knowledge of conditions of employment, computer science, working with machines, interview training and theoretical subjects.

Graduates from **administrative/economic** courses, who proceeded to hbo, mention computer science, interview training, organisational skills, writing reports, theoretical subjects and knowledge of conditions of employment. Those who have a job mention computer science, knowledge of conditions of employment, interview training and practical training/work experience.

Graduates from **health care** training, who entered hbo, mention computer science, spelling skills, knowledge of conditions of employment, interview training and speech skills. Those who have a job mention knowledge of conditions of employment and interview training.

Havo-graduates, who entered hbo, mention computer science, writing reports, practical/work experience, organisational skills, interview/application training and knowledge of conditions of employment. According to those who entered the labour market the following skills should have

been paid more attention to: computer science, knowledge of conditions of employment, interview training, practical/work experience, careers guidance, organisational skills and writing reports.

Although the specific `lists' of aspects are different for each sector and group, there are some commonalties between the groups. According to graduates, mbo should pay more attention to: computer science; knowledge about conditions of employment; interview/application training; organisational skills; careers guidance and writing reports.

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.

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.

On the other hand, we might conclude that mbo has been 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, 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, 1996). [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 HE students' views on how well GNVQ prepared them for their HE studies.

11 Student perceptions of the value of GNVQ as a preparation for higher education

In a section of the UCAS publication 'In their own words' (UCAS, 1996a) the comments of over 160 students, interviewed as part of a qualitative investigation, are summarised. The students considered there were strengths and weaknesses in having taken GNVQ as a preparation for higher education. Some students pointed to the effect being successful on GNVQ had had upon their self-confidence, leading to a changed self-perception of themselves as successful learners. For others, experience of a broad vocational area (and possibly of work experience in that area) had led them into decisions that they were committed to seeking employment in that area. This has had consequent effects on their motivation and commitment to HE study. These types of attitudinal effects could be particularly significant for those who had had only limited previous success on academic pathways: they had found an approach to learning that suited them, and within which they could demonstrate to themselves (and others) that they could be successful.

That GNVQ grading criteria placed particular emphasis upon the development of 'independent learning' skills was, retrospectively, seen as a strength. The encouragement to use libraries, plan their work and assess their own work within GNVQ often helped students cope with the scale of independent learning required on many HE programmes. The students' experience in the key skill areas of communication and information technology were also perceived as a real strength, as: "the overwhelming view of Advanced GNVQ students was that they were good at presentations, group work and verbal communications, and that these skills helped them with their HE studies. Many students were appreciative of the confidence they had developed in Information Technology, citing this as a very important advantage they have over many of their GCE A Level counterparts" (p21, UCAS, 1996a).

The former GNVQ students, however, recognised that their prior experience also disadvantaged them in certain ways, 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 perhaps less easy to resolve, especially since "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. However, the trend within HE, particularly as a consequence of the shift towards semesterisation, had been of greater and more frequent use of examinations. Some students may have had experience of examinations in their additional (GCE A or AS level) studies, 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).

Whether Advanced GNVQ students had sufficient depth of knowledge prior to entry to HE varied between subject areas and was also dependent upon the nature of the specific HE programme chosen. Those students entering HE programmes with a high scientific or mathematical content were particularly likely to have wished that they had had a stronger grounding in the traditional sciences or in mathematics, since "unless they have fully mastered certain scientific or mathematical principles they struggle on some degree courses" (p20, UCAS 1996a). Similarly, some students considered that "they needed a greater understanding of the mathematics relevant to their occupational sector than they had achieved through taking Key Skills in Application of Number as part of their Advanced GNVQ. This was particularly the case for Leisure & Tourism and Business GNVQ students progressing to some of the more statistically demanding Business degrees" (p21, 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 indepth 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 `Fit' with HE admissions strategy

Even where a student has followed a GNVQ programme which `fits' with a particular HE programme this may not be sufficient. There is also the question of whether there is a `fit' with the HE admissions strategy. Indeed it is quite likely that for some students the acceptability of their GNVQ programme may be as much a function of the admissions tutors' lack of staff development as of what the students actually achieved on the programme. A number of admissions tutors were frank in admitting they did not possess an adequate understanding of the different types of qualifications (Brown and Bimrose, 1993), and GNVQ students felt there was prejudice against them in the admissions process (UCAS, 1996a).

The following are all likely to be associated with improved chances of entry into HE for an applicant from a GNVQ programme (adapted from Brown, 1994):

- entry criteria primarily structured around possession of skills, qualities and `ability to benefit', with qualifications being used indicatively, rather than the prime emphasis being upon past academic attainment
- degree of emphasis given to `other (non-A level) routes'
- marketing which highlights success of students from `other routes'
- flexible entry criteria
- explicit access and/or franchising networks and links
- involvement in local or regional collaborative arrangements to widen access
- provision of bridging/preparatory materials to candidates who need `strengthening' in particular areas
- availability of pre-admissions guidance
- application to an institution/course which is primarily concerned with recruitment rather than selection. [The latter often have overwhelming numbers of `conventional' applicants.]
- experience in handling entries from vocational routes
- willingness to look at an appropriate range of evidence
- willingness to look through what has been achieved post-16 (some admissions tutors use rapid scanning of GCSE performance as a screening device: hence they may not register at all what has been achieved on GNVQ)
- where applicants from vocational routes are particularly encouraged.

12.3 Evidencing achievement of GNVQ students applying to HE

From the above it is clear that admissions tutors understanding of GNVQ students achievements may vary greatly. In any case it might be useful for GNVQ students to draw particular attention to their strengths and, when applying to institutions or courses that are very competitive, it may be as well to ensure that their UCAS application form contains specific examples of achievement in a number of key areas. For example, evidence of an **ability to communicate** could focus upon precise descriptors of contextualised achievement relating to the possession of abilities such as being able to communicate with clarity, coherence, appropriateness and purpose (in written and

spoken communications); being an effective listener; being able to work in teams or small groups and so on. Evidence of **organisational ability** could relate to effective time-management (planning and meeting deadlines); seeing tasks through to completion; and/or abilities to organise ideas and information (arguments) or activities or groups (leadership). **Adaptability in learning** could be evidenced in relation to familiarity with a range of teaching and learning strategies: enquiry based or investigative work; independent or self-directed learning; collaborative working; ability to cope with a range of teaching styles (for example, small group work and large lectures); action planning and self-review (of time, organisation and direction); and the ability to analyse processes and outcomes of learning (Brown and Bimrose, 1993).

Admissions tutors are likely to be particularly concerned with **academic skills**. Analytical skills could be evidenced by contextualised examples of an ability to think analytically; appropriate use of evidence; systems thinking; use of skills of planning and interpretation. Skills of evaluation could be evidenced through abilities to: disclose underlying assumptions and values; draw independent conclusions from a range of evidence; judge information and criticise ideas; and identify competing perspectives. Evidence should only be required of use of **some** of these skills in context. Also applicants would still be using evidence of (expected) achievement on the formal GNVQ programmes to support their application. However, making reference to tangible evidence of an individual's possession of academic skills may reassure conservative admissions staff. Similarly reference could be made to any major project or investigative work undertaken on the programme.

12.4 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 students too share some of these concerns. Interestingly, the problems with transitions to HE of the students from full-time school-based vocational pathways in the two countries appear 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. In the light of this it is significant that mbo graduates would have liked more attention within mbo to have been given to a set of skills relating to career development (knowledge about conditions of employment; interview/application training; and careers guidance). It is as if having made such an early commitment to a particular direction, these students want continuing information which will enable them to check whether this is the most appropriate path for them to follow. The other set of skills hbo students, who had graduated from mbo, would have liked greater emphasis upon in mbo were the generic ones of information technology; organisational skills; and writing reports.

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 former GNVQ students, now in HE, also identified that one of the strengths of GNVQ is the emphasis upon generic skills like information technology; organisational skills; communication skills and so on. Instead the former GNVQ students were likely to feel most disadvantaged by their lack of sufficient depth of knowledge for

particular HE courses (UCAS, 1996a). Whereas the mbo courses give students a more substantive knowledge base prior to entry into HE.

The challenge for the future for both qualifications 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 final thought is that the Dutch system of having an extended vocational pathway, as compared to the academic pathway, may 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.

14 References

References in Dutch

Gelderen, Amos van, Ron Oostdam (1996). Talenonderwijs in het vernieuwde mbo. Inventarisatie van problemen en praktijkoplossingen. Amsterdam, SCO-Kohnstamminstituut.

Gennip, J. van, F. van Geest, J. Frietman (1995). Doorstroomkwalificatie in het MBO: uit de lengte of uit de breedte. Eindverslag van een exploratief onderzoek naar de studielast in het MBO. Nijmegen, ITS.

Moerkamp, Trudy, Monique Volman (1997). Via mbo naar hbo. Een inventarisatie van ontwikkelingen in de relatie mbo-hbo. Amsterdam, SCO-Kohnstamminstituut.

ROA (1997). Schoolverlaters tussen onderwijs en arbeidsmarkt 1996. Maastricht, ROA.

Roeleveld, dr.J., drs. M. Babeliowsky (1996). Verder in het HBO? De overgang van Middelbaar naar Hoger Beroepsonderwijs. Amsterdam, SCO-Kohnstamminstituut.

References in English

Brown A. (1994) What messages do higher education admission policies send to applicants, Paper presented to the Society for Research into Higher Education Annual Conference, York, December 1994.

Brown A. (1996) Attempting to create a 'middle pathway' between vocational and academic routes: a critical review of the introduction and implementation of GNVQs in England (INTEQUAL national case study), Guildford: University of Surrey.

Brown A. and Bimrose J. (1993) Admissions to higher education: current practice and future policy, Journal of Access Studies, 8, 2, 154-169.

Brown A., Moerkamp T. and Voncken, E. (1997) Facilitating progression to HE from vocational pathways, Paper to be presented at European Conference on Educational Research, Frankfurt, September 1997.

BTEC (1993) Going on: progression into higher education from BTEC programmes, London: BTEC.

Dearing R. (1996) Review of qualifications for 16-19 year olds: summary report, Hayes: SCAA publications.

FEDA (1995) GNVQs 1994-95: a national survey report. The evolution of GNVQs: enrolment and delivery patterns and their policy implications, London: FEDA.

FEU (1994) GNVQs 1993-94 a national survey report, London: FEU.

Manning, S. (editor) (1996). Qualifications with a dual orientation towards employment and higher education. A comparative investigation of innovative schemes in seven european countries. INTEQUAL report I. Berlin: WIFO.

Moerkamp T. and Voncken E. (1996) Dilemmas on the mbo route to higher education. Double qualifications in senior vocational education in the Netherlands. (INTEQUAL national case study), Amsterdam: SCO-Kohnstamm Institute.

Oates T. (1996) The development and implementation of key skills in England, London: NCVQ.

Ofsted (1994) GNVQs in schools 1993/94: quality and standards of General National Vocational Qualifications, London: HMSO.

Spours K (1995) The strengths and weaknesses of GNVQs: principles of design, Learning for the future Working Paper 3, London: University of London Institute of Education.

UCAS (1996a) In their own words: students talk about GNVQs and higher education, Cheltenham: UCAS.

UCAS (1996b) Advanced GNVQ and access to higher education (UCAS Summary), Cheltenham: UCAS.

Wolf A (1991) Assessing core skills: wisdom or wild goose chase, Cambridge Journal of Education, 21, 2, 189-201.

Wolf A (1994) Measuring competence: the experience of the United Kingdom, European Journal of Vocational Training, 1, 29-35.

Wolf A, Burgess R, Stott H and Veasey J (1994) GNVQ Assessment Review Project, London: Institute of Education.

Wolf A (1995) Competence-based assessment, Buckingham: Open University Press.