



working
in health

access
network

The Working in Health Access Network

Interim Report and Discussion Paper
January 2009

Foreword

The Working in Health Access Network (WHAN) exists to increase interest in a career in health amongst school pupils. The focus of WHAN is to increase their aspirations and provide information concerning courses in healthcare in both universities and colleges - as well as introducing them to a wide range of exciting options for the future. The National Health Service (NHS) is the largest employer in the country and is central to the well being of the economy at large. At the heart of any strong and confident organisation is a knowledgeable, professional and motivated workforce. WHAN works directly with the next generation of health workers to ensure that the health sector is staffed by committed individuals with the skills required to help make Scotland a healthier, stronger, fairer, smarter and wealthier place in which to live, study and work.

This report portrays the development of the WHAN network so far. It also raises questions and challenges for the future. As the current phase of WHAN continues until this July, the complete statistical analysis is not yet available. Nevertheless, there is considerable creativity, innovation and success in WHAN school and college activities. This report is an introduction to these activities; more detailed outcomes will be available from the middle of 2009.

The project has forged a successful partnership. It grew out of the Working in Health Access Programme (WHAP) that was aimed particularly at medicine and veterinary medicine. The need to diversify to other health professions became apparent in order to fulfil the aspirations of young people, to provide realistic ambitions for them and, also, to be more cost effective. It led, moreover, to the development of a national collaboration that has been expanded and developed in WHAN. The project has demonstrated the strength of the collaborative alliances and networks amongst universities, colleges, the NHS and local authorities. Widening participation has become central to the aims of the participating educational institutions.

Planning seeks to minimise risk. WHAN aims to be proactive and not reactive. With large numbers of healthcare workers expected to leave the NHS in the next few years, there is a real possibility that without action, significant extra resources may be needed at short notice to fill the resulting skills gap. WHAN helps the NHS recruit key elements of its future workforce by developing effective links in schools and community groups. WHAN has already helped raise awareness of a career in health. The partnership WHAN has fostered will undoubtedly further encourage more young people from diverse backgrounds to consider such a career - to the benefit of Scottish patients.

We do hope you will continue to contribute to this vibrant partnership.

Professor Sir Graeme Catto
Chair - WHAN National Advisory Committee

Professor Mary Ann Lumsden
Chair - WHAN National Executive Committee





Executive Summary

The Working in Health Access Network (WHAN) and its predecessor, the Working in Health Access Programme (WHAP) engages and informs S3 to S6 pupils throughout Scotland about healthcare study, in both universities and colleges, and of the resulting career pathways. Its 100 + target schools are characterised by low participation rates in tertiary level education.

WHAP/WHAN came into being because of the concern that children from families with little or no tradition of further or higher education were being denied the opportunity of working in the healthcare professions and were unaware of the opportunities. The importance of a methodology that was suited to the remote and rural communities of Scotland was also of paramount importance.

Beginning with a focus, in WHAP, upon medicine, dentistry and veterinary medicine, the project's range soon expanded, through evaluation and in response to requests from schools and colleges, to the engagement of pupils interested in professions from the full gamut of healthcare specialities. 52 careers in health have been promoted through WHAN information - from Nursing Assistants to Phlebotomists to Radiographers to Consultant Anaesthetists. WHAN is, therefore, well placed to respond to the forecast gaps in the future healthcare workforce.

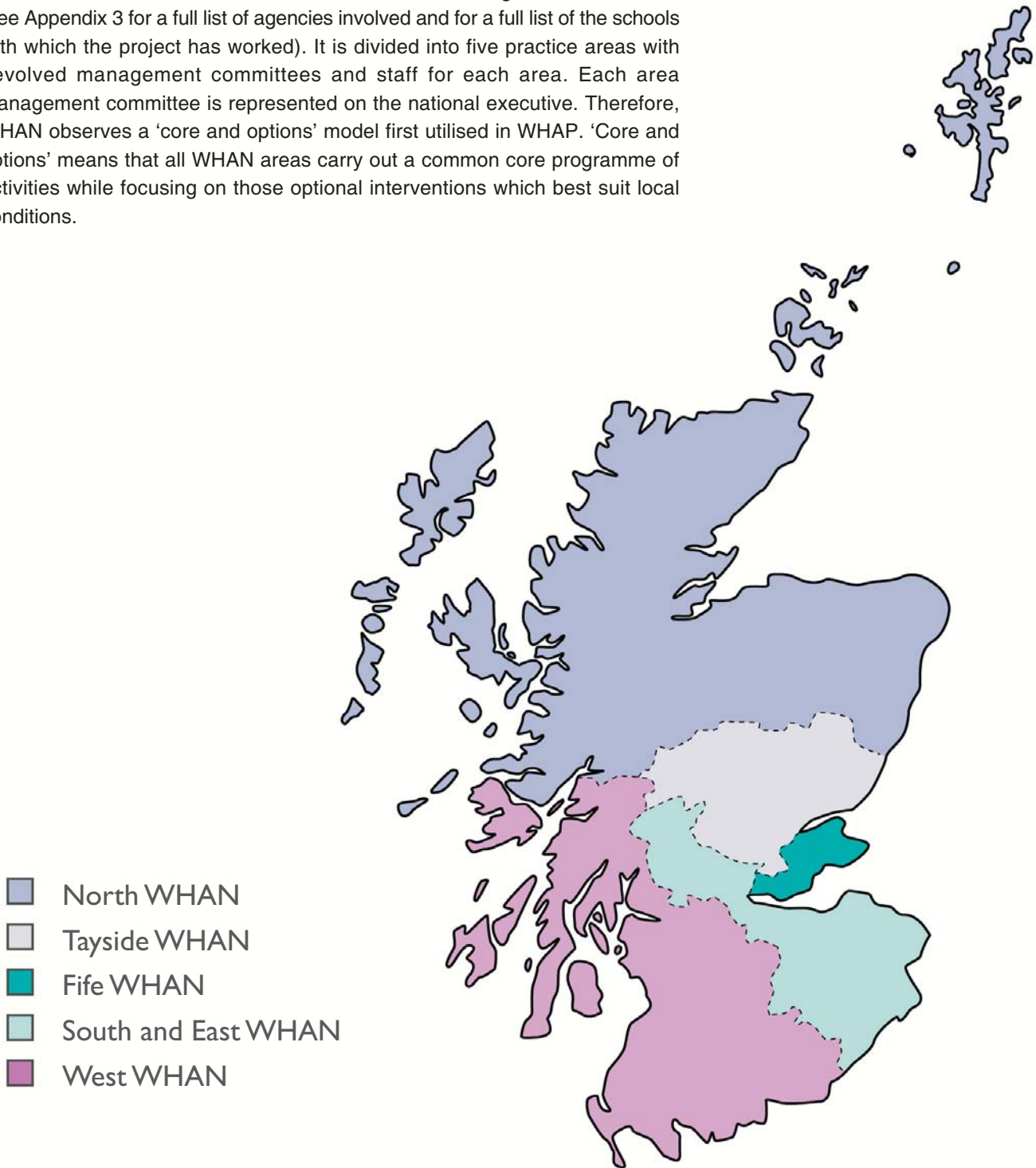
To take these requirements forward, WHAN recognised the need for a devolved structure - a network of five areas working on agreed core principles but responding to locally defined needs. Each local Management Group is itself a collaboration of relevant professional agencies - from service delivery to qualification and certification. Beginning with large-scale awareness-raising events to engage the interest and enthusiasm of S3 pupils, WHAN staff work with schools and their network of field agencies to identify pupils with interest in specific courses and professions. By raising interest and aspiration and by supporting attainment WHAN activity assists pupils to maintain engagement and to clarify their future needs. Consequently, other agencies in the field have been drawn in to take forward the development of their interests. Over 3,000 pupils have participated in WHAN activities and events so far. At present, 27 universities and colleges are involved in the delivery of these. In parallel with WHAN activities a large-scale evaluation of the project's practice is taking place, which has been developed from the WHAP pilot. WHAN's baseline study of attitudes and motivation allows continued longitudinal tracking of those pupils who have been involved with the project since its inception. 5,669 pupils have participated in the baseline evaluation study to date - making it one of the largest-ever studies of school pupil aspirations in the country.

Overall, WHAP/WHAN has succeeded in raising awareness and aspiration. It demonstrates the effectiveness of engaging directly and interactively with young people in order to clarify and support their ambitions. It does so in a manner that promotes increased and more equitable access to the healthcare professions. 74% of pupils surveyed had never thought about working for Scotland's largest employment sector - until WHAN raised the prospect with them!

In a cost-effective manner, embedded in the institutions and agencies offering these provisions, WHAN demonstrates the advantages of focus and of direct activities. The prime question then is - where next should we use this proven approach?

National WHAN

WHAN is, first and foremost, a national collaboration of agencies in Scotland (see Appendix 3 for a full list of agencies involved and for a full list of the schools with which the project has worked). It is divided into five practice areas with devolved management committees and staff for each area. Each area management committee is represented on the national executive. Therefore, WHAN observes a 'core and options' model first utilised in WHAP. 'Core and options' means that all WHAN areas carry out a common core programme of activities while focusing on those optional interventions which best suit local conditions.



Networking locally, considering careers in health nationally.



Aims and Objectives

WHAN aims to do at least two things: to raise awareness of studying for a career in the health professions and, secondly, to do so in Scottish schools which have a lower-than-average transfer of pupils to higher education or are in remote or rural locations where recruitment to health services is a priority. Over the past two years we have been helping recruit the health workers of the future and, in particular, those from communities and social backgrounds who would not, normally, consider such a professional future. The use of healthcare professionals (at all levels and grades) and of undergraduate students, has been central to the process of engaging attention and then narrowing down to the fine detail of subjects and courses necessary for progression to a particular profession.

WHAN piloted its methodology in the Working in Health Access Programme, a centrally run initiative based on a collaboration of the Scottish medical schools. WHAN developed into the 'Network' - a devolved collaboration involving a wide range of institutions and agencies using the experience gained from WHAP.

Our project objectives to July 2009 are:

- * To increase the number of individuals from a wide variety of backgrounds progressing to study a health-related course at college or university;
- * To inform pupils and adult learners about the full range of health-related careers;
- * To build strong and sustainable regional networks to promote careers in health;
- * To provide robust evaluation and monitoring of project initiatives;
- * To explore the development of admissions strands.

With the demography of the NHS workforce predicted to change adversely over the next ten years, WHAN activities directly contribute to the recruitment of the next, and future, generation of healthcare workers.

Significant work has been undertaken over the last 10 -15 years, on a national canvas, to demystify and make accessible organisations such as universities and colleges. The access agenda continues to be an integral part of the missions of most publicly funded educational institutions in Scotland. However, gaining a qualification or skill to perform a job is one thing, but understanding the structure and culture of the organisation you intend to work in is another thing. WHAN is uniquely placed to demystify the NHS in order to inform future employees of the benefits of working for one of the most prestigious organisations in the world. Through its focus on diversity and inclusion (in which WHAN representatives have participated) the NHS values the individual and their contribution to the wider aims of the organisation. WHAN has raised the profile of the NHS as a potential employer with school pupils who were previously unaware of the range of careers and opportunities available within it.

WHAN is concerned not only about the doctors and dentists of the future but also about the dental hygienists, audiologists, pharmacists and the assistant practitioner roles - to mention but a few. Our research shows that whilst Scottish school pupils know a little about the roles of nurses, doctors and dentists, they are generally unaware of the opportunities in the wider NHS healthcare team. A key strength of this project is informing pupils in its target schools about the less well-known, but essential, activities of professionals such as phlebotomists, perfusionists and occupational therapists. The pilot Working in Health Access Project (WHAP) was initially focused on the role of doctors, dentists, vets and nurses but then developed to include the more well-known Allied Health Professions such as radiography and physiotherapy. WHAN has built on this foundation by extending its collaborative ethos and by extending the range of courses and careers included in its awareness-raising activity.

Practice

WHAN's proactivity - considering careers in health.

WHAN offers specific guidance on careers in health in tandem with delivering hands-on interactive workshops. It can also provide, where suitable collaborations exist, work experience and individual support to pupils with a declared interest in a specific course and qualification. This is an area of activity that would yield fruitful opportunity for further development. In addition WHAN can offer summer schools which provide interaction with NHS staff in order to give pupils and adult learners a realistic and practical insight into what it means to study to become a health professional. Our interventions are delivered regionally to address local need and local situations. The networks we have built however, are founded on national collaborations, experience and innovation.

One of the key strengths of WHAN is the cumulative expertise held amongst the ten Network Liaison Officers who have developed and delivered activities on careers in health over the past few years to thousands of potential healthcare professionals. It is a credit to the professionalism and expertise of this group that, in the age of 'initiative overload' in the secondary school sector, WHAN staff are continually asked back to deliver more and more activities. School and local authority management recognise the value of the project and the opportunities and aspirations that are provided for pupils. Linking in with *Determined to Succeed* and the *Curriculum for Excellence* blueprints, WHAN assists with the aims of the latter – the development of successful learners, confident individuals, responsible citizens and effective contributors.

WHAN fills a gap in the understanding of most pupils. They may have an appreciation of the role of a doctor or a nurse but may not have informed knowledge of what they actually do or of other healthcare professions - say, that of a podiatrist or of a clinical cytogeneticist. Once these young people know that such career choices exist their interest grows. Their choice of a course of study that would lead to a qualification in an area of healthcare then becomes more likely.

Health skills workshops engage with pupils and inform them of a number of pathways into the health services. College and university courses may be the norm but there are also routes through work-based learning in the health sector. It is understandable that many pupils think a certificate, diploma or a degree is the only way to become a health professional but the WHAN team have been emphasising the *Agenda for Change* in the NHS and the creation of new job opportunities in the form of Assistant Practitioner roles and the like. An increase in the quantity and availability of relevant information about entry and progression routes to the NHS, delivered directly to schools, will help reduce the number of poorly informed choices that many school leavers make. Poor decision making, particularly when it comes to life-changing decisions such as choice of career, can dash hopes, dent aspirations and lead to false starts with a financial, and emotional, cost.

WHAN provides information and guidance on choices and chances at the start of the career planning process. Receiving relevant material and sound advice when applying for health-related jobs or courses creates confidence in the choices made and in the skills to be developed. A more informed and focused workforce promotes efficiency and cost saving in the future. Young people are very good at looking forward but they need to know all of what may be on offer. WHAN helps them understand their future potential and also to develop a realistic view of their aspirations.

There is a strong and practical case to be made for WHAN to be used on a more formal basis as the conduit for delivering information on careers in health. WHAN's links with schools and with practitioners allows 'awareness raising' to be delivered in a managed and targeted way. Continuing successful collaborations with specialist professionals in individual health boards or with colleagues in education and the careers field continues to demonstrate this.

Methodology and project delivery

Given that the *Agenda for Change* highlights the creation of a number of new roles in the NHS, future employees should be made aware of these potential career opportunities in advance of their being advertised. Pupils should be given the time and opportunity to plan to go into work, college or university at an appropriate level for the job they wish to pursue. School pupils are very 'brand conscious' and, to put it in marketing terms, they like to be aware of 'product developments' so they can evaluate the benefits of the offering fully. With a flattening in demand for traditional career opportunities, much work is still required to inform pupils of these changes and of the career progression available within the health sector. Without continuing the 'awareness raising' activities in schools, colleges and the wider community there is a risk that pupils or adult learners will miss opportunities simply through lack of knowledge.

An interesting outcome of our work is that WHAN activities highlight to pupils that some health related careers are not for them. It may be that their view of work in healthcare is unrealistic; perhaps derived from the scripted unreality of television programmes such as *Casualty* or *Holby City*. Through WHAN, their acquaintance with real practitioners may highlight aspects that do not appeal to them. Options like these will help minimise attrition rates by focusing on the realities of pursuing a particular career path.

WHAN interventions as they relate to the NHS career structure are described in Figure 1 below.


	NHS Career Framework	Emphasis of career development	Example of WHAN activities targeting						
	More senior staff		Clinical skills workshops	Application and interview clinics					
8	Consultant practitioners							Shadowing and mentoring	Insights into working in health
7	Advanced practitioners								
6	Senior or specialist practitioners					Mental health day			
5	Practitioners								
4	Assistant or associate practitioners								
3	Senior healthcare technicians and workers							SQA Level 4 Skills in health units	
2	Support services								
1	Initial entry level roles								

Figure 1. NHS Career Framework

Our target schools typically have a relatively low proportion of pupils moving on to college or university. When the baseline statistics are broken down further, few of these pupils seem to be motivated to work in health. This should be of real interest to Workforce Planning Directorates across the country as most of the WHAN targeted pupils will be from NEC Classes 4-7, which generally populate the entry grades 1-4 in the NHS. WHAN does not just offer simple lectures to inform pupils about a career in health; the interventions we run are interactive, relevant to careers in health and fun to participate in. During the second half of the project, the objective of our initiative moved explicitly to focus on working in the National Health Service. This was done as a direct consequence of listening to the needs of the sector and the approach can be modified quickly to react to market forces. There is real scope for WHAN to reinforce the 'joined-up' relationships between the Scottish Funding Council, National Education Scotland (NES) and the NHS.

The Funding Council's publication *Learning to Work* presented ideas and challenges for learners, educators and employers to work together to create new and better learning experiences. WHAN directly furthers the priorities underpinning these structures. WHAN identifies those with the potential and aptitude for the healthcare professions and develops that interest and ability through to entry into employment. Those who have second thoughts will opt out of the project as we continue to offer a 'core and options' programme delivery menu. The relationship between present staff and potential staff, through information events and activities and through direct mentoring, facilitates the efficacy of the student's choice – to enter healthcare study and training – and subsequent higher attainment.



WHAN's generic project work

The Case Studies below have been chosen to illustrate how each WHAN area adapted its approach to match local conditions. Where an initiative was tested and shown to work it was often the case that consultation and communication between WHAN staff across the country led to similar initiatives taking place at other sites.

The 'core' element of WHAN practice, while subject itself to change and development, drew from the WHAP pilot where it began as the following set of principles:

- * To raise awareness of the possibility of a career in healthcare (initially medicine, veterinary medicine and, subsequently, dentistry and nursing in WHAP) and of the courses which could lead to this.
- * To engage the imagination and the interest of pupils with interactive workshops.
- * To utilise the skills and enthusiasm of the most effective advocates of all - current students.
- * To avoid 'chalk and talk' but to respond with information and with referrals to collaborating institutions and agencies whenever pupils felt that they could make an informed choice.
- * To begin with the 'wow factor' to engage interest and to provide realistic advice and guidance when asked - but to avoid patronising pupils.
- * To collaborate with other agencies in the field and to provide support and expertise to assist these initiatives wherever possible.

The project illustrates these core principles. Similar activities have been carried out, to a greater or lesser degree, in most WHAN areas:

- * Clinical Skills Days have introduced hundreds of pupils to the realities of infection control in hospitals, to scrubbing up and to the communication skills required for working as part of the healthcare team.
- * Promoting the work of mental health professionals at the same time as the Scottish Government's *See Me* campaign has raised awareness and information sharing.
- * Working with guidance staff and teachers on the new career framework in the NHS has provided up-to-date information and has enabled professionals in both health and education to appreciate the constraints working on them.

- * Pupils and teachers visited hospitals to gain a practical insight into working in health. Presenting issues in terms of problem solving helps to demystify the work of the NHS. Activities are designed to give some insight into the work of particular professions within healthcare and to illustrate the satisfaction that can come from a job well done – at whatever level. WHAN activities attempt to answer practical questions such as: Do I have the co-ordination skills needed for surgery? Could I look after a pregnant woman and deliver her baby safely? How would I help someone develop better balance? How does Ultrasound work? How do theatre staff keep a patient safe during an operation? How does an Occupational Therapist help people cope with day-to-day tasks?
- * Development of Access Programmes for Mature Students in Fife and the West of Scotland.
- * Opportunities for S5/6 pupils to visit hospitals to shadow clinical staff and visiting universities and colleges to meet with students studying health-related subjects.
- * Online mentoring has become a collaborative initiative amongst the universities and colleges in the west of Scotland and has been taken up in other parts of the country.
- * Assistance with writing UCAS and CATCH Personal Statements and practice interviews has been rolled out across a number of the regions.
- * Pupils have taken part in residential summer schools to understand what it means to work and study in a health-related field in line with recommendations made in *Learning for All*.

A wide range of health professionals have been directly involved in WHAN activities. These professionals have given of their own time in order to interest WHAN pupils in their work and to assist them in developing and carrying forward their own aspirations in these fields. Health Boards have been appreciative of this work as a means of highlighting the vacancies in particular occupations and the challenges and satisfaction in becoming a physiotherapist, radiographer, occupational therapist, speech and language therapist, podiatrist, pharmacist, pharmacy technician, dietician, nurse or doctor – to name but a few! It is noted later that the involvement of these professionals, as with the involvement of further staff from universities and colleges, has been provided – without exception to date – as 'in-kind' contribution to the project.

Case Studies

Case Study 1 – Raising Awareness

Activity: Discovering Careers in Mental Health and Well-being

Target Group: S3-6 Pupils in WHAN schools

“With ever increasing evidence to show that mental illness is one of the leading causes of disability worldwide, it has never been more important to attract pupils into the field of mental healthcare.” Specialist Registrar, General Adult Psychiatry, NHS Tayside.

With this in mind, WHAN co-ordinated a workshop for seventy school pupils in Dundee to learn more about the diverse range of careers available within the mental health sector. It also widened the horizons of pupils interested in nursing as well as scientifically capable pupils leaning towards forensic sciences. The pupils met mental health nurses, psychologists, occupational therapists, a psychiatrist, a counsellor and a representative from the Hearing Voices Network. 83% of the pupils found the day very worthwhile and all now have an understanding of the distinct nature and challenges of working in mental health and of the other health professionals working in this field. Essentially, a new sector in the health service has been opened up to this group.

Case Study 2 – A Two-way Process

Activity: Medical students working in schools

Target group: First generation doctors in WHAN target schools

As part of the University of Aberdeen Medical School’s Medical Humanities programme, organised jointly with the School of Education, Year 3 medical students have the opportunity to undertake teaching placements in North WHAN project schools around northeast and north Scotland and Shetland.

The module has three components - Induction / School Placement / Assessment - each two weeks long. Induction involves preparatory visits to schools, lectures on relevant aspects of learning, and tutorials on lesson preparation from two former Principal Teachers of Biology. Working in pairs and mentored by a senior member of science staff, students on school placement develop and deliver learning materials with a medical dimension in science and other subjects. Mentoring of senior pupils interested in careers in health, and discussion of student life, UCAS statements, work experience and interview technique, are also offered. Assessment elements for the module are (i) an evaluative essay based on a self-selected piece of schoolwork (ii) a portfolio of learning materials (iii) an audio-visual presentation on the school experience. All assessments are marked on the University’s Common Assessment Scale (CAS).

Positive feedback from pupils and students highlights the mutual benefits of these placements. Now in its sixth year, the scheme has also been highly praised by school staff and by the General Medical Council.





Case Study 3 – Enlightening the Enlightened

Activity: Embedding WHAN for the future

Target group: Teachers and advisors

Through carrying out direct work with young people, opportunities arose to provide staff development and up to date guidance in health related courses for relevant staff in schools. This helps to develop knowledge and expertise at a local level that will endure beyond the end of the project. It is recognised by schools as advantageous in providing opportunities for continuing professional development (CPD).

Working in partnership with Careers Scotland and local FE and HE colleges, a number of conference and seminar sessions were held to update staff on health care careers and courses. In addition to presentations on course options and admissions, a range of workshops were developed covering topics such as articulation between FE and HE and that of finance for students on health-related courses.

This particular piece of project work recognises that WHAN's 'target groups' are not just pupils but also the professionals, and the parents, who are 'stakeholders' in any endeavour such as this. Communicating and interacting with fellow professionals results in an enhanced service, across the board, for the young people involved with WHAN.

Case Study 4 – Community Based Collaboration

Activity: Responding to local circumstance in 'remote and rural' areas

Target group: Education and Health Professionals in Argyll and Bute

After discussion with the LEA in Argyll and Bute a senior teacher was seconded to West WHAN to set up WHAB – Working in Health in Argyll and Bute. A local management committee of education and health professionals was formed and specialists from both disciplines brought in to run workshops with pupils in the local schools.

In common with pupils involved in WHAN nationally, school groups visited universities and colleges for hands-on interactive workshops based on healthcare procedures, led by students on relevant courses such as medicine, physiotherapy and nursing. However, WHAB pupils had the additional benefit of local in-school and in-centre sessions delivered by professionals working in their own communities. This covered the islands as well as the northern mainland in Argyll.

A grant was obtained from the Brightside Trust to develop online mentoring whereby healthcare students communicated with senior pupils via a secure blogsite provided by the Trust and provided monitored advice and information on their respective courses.

WHAB very quickly developed to a full handover where all WHAN-type activities were organised and carried out by staff from local health and education agencies. The reorganisation of Health Board boundaries quite soon after then cut across the arrangements. Despite this, WHAB illustrated the 'embedding' target. The mentoring trial illustrated the value of this initiative and was extended further within West WHAN.



Case Study 5 – A Collaborative Process Approach to Work Experience

Activity: Volunteering Information Packs

Target group: Volunteer Agencies in Central Scotland

Work Experience placements in health care settings can be difficult to source:

- * WHAN pupils - who may be the first in their family to consider higher education - will be unlikely to have the personal and social contacts that might provide these opportunities.
- * Health and safety requirements restrict what hospital and community health care can offer.
- * More students are requesting placements as entry to university courses becomes more competitive. This places an additional burden on NHS Boards meaning some cannot meet the demand.

Universities are aware of the problems that potential students face and many will consider as relevant other experience that applicants can present, particularly when describing what they have learned and how this applies to their chosen course and career.

WHAN South East approached Volunteer Centres in Stirling and Falkirk to explore how we could work together to promote alternative work experiences to school pupils. Volunteering organisations are keen to promote volunteering amongst young people and, thus, a positive partnership opportunity was targeted.

WHAN South East and the Volunteer Centres produced Volunteering Information Packs for S5 and S6 students in target schools. These set out:

- * The benefits of volunteering in a caring environment and how to use that experience in applications.
- * Information on volunteering credit schemes such as the MV Awards.
- * A Hot Opportunities List, detailing volunteering placements at a range of projects including Care Homes for the Elderly, Sensory Gardens open to a range of disadvantaged groups, Hospital Radio and WRVS, Riding for the Disabled and support groups for people with dementia.
- * Contact details of the Volunteer Centres for pupils to arrange placements.

Packs were distributed around Stirling in the Summer of 2008 with 120 going to 4 schools. 180 packs will be distributed to 5 schools in Falkirk in the Spring term of 2009. Follow-up workshops are planned to explore options further, match students to placements, and highlight how they can relate their experiences in applications.





A Pointer to the Future?

Most of the work highlighted above has involved the integration between health, education and other agencies. There are other mechanisms for integration, however, and the case below highlights an academic development, founded in collaboration with distinct practice outcomes.

Case Study 6

Activity: Promoting Skills in Health in Rural and Remote Areas

Target Group: S3-6

For many pupils across north Scotland interested in working in health, especially those living in remote and /or rural areas, accessing work experience can be difficult. For this group, a health-focused Skills for Work course, certificated nationally but delivered flexibly and sustainably through local school-college partnerships was developed. This included a range of relevant experiences in simulated environments – seemed to both the *Determined to Succeed* Highland and North WHAN to be a desirable innovation.

Consequently, in 2007, these two projects collaborated in engaging NHS and UHI in discussions about how Skills for Work opportunities might be extended to the Health Sector. Scoping work established an enthusiasm and a demonstrable need for a Skills for Work qualification in Health, which SQA agreed to develop. The new course – the SQA NQ Skills for Work Course, Health Sector – was launched in December 2008. It has five mandatory units: Introduction, Roles and Responsibilities, Health Awareness, Working Safely and Life Science Industry.

The ‘added value’ in this initiative is that the uptake of this SQA course will not be confined to the Highlands, although it is particularly relevant in this area of Scotland.



Project Evaluation

It is not appropriate to provide a full statistical evaluation of the project at this time, as the initiative is still running and evaluation is ongoing across the five networks. At the time of writing, there have been two complementary strands of data collection. The first, comprising a baseline survey, was distributed to pupils in S3 at WHAN schools. The survey collected data on: demographics (date of birth, gender, ethnicity and disability), family background (parental occupations, parental levels of education, the educational level of elder siblings if known and family postcode), and future plans (likelihood of going to college, university or entering employment and who had the most influence on these plans). It also asked if pupils had considered a career in the health sector, if they knew someone who worked in the health sector and of their knowledge and interest in health careers. In addition, it asked pupils to complete a validated instrument to measure their motivation for education¹. Measures to link pupil scores from the motivational inventory to results obtained in Standard Grade examinations taken in S4 are ongoing.

At each event or activity that the network and partners organise, pupils are asked to complete an evaluation form. Pupils are asked whether or not they had already thought of a career in the health sector and whether or not attendance at an event had made them reconsider their choice. If they expressed an interest, they were asked if they had any idea of the specific type of job they were interested in and, if not, they were asked what other, if any, careers they were thinking of. In addition, some demographic details are sought (age, gender, postcode). Finally, pupils are asked to evaluate the event attended, to name the best and worst aspects of the event and to offer suggestions for future events and activities.

While not all pupils who attend an event will have completed the baseline survey, it is hoped that through the use of probability-matching software the two datasets (baseline and evaluation) can be combined and survey records linked to individual evaluations.

While the results from the overall project evaluation will not be available until after the project has finished it is possible to offer the headlines from both the baseline survey and the event evaluation.

The baseline survey

- * 5, 669 pupils in S3 completed the baseline survey instrument.
- * Females accounted for 49.8% of the baseline study and males 50.2%.
- * Only 3.3% of the sample was from a non-white ethnic background and only 4.6% reported a disability.
- * Females exhibited a significantly higher level of 'knowledge' and 'interest in' health careers. However, there was no significant difference in 'knowledge' or 'interest' by deprivation categories (DEPCAT). While 47% reported that their family had the most influence when considering a career; 13% reported 'friends' and 15% reported 'teachers'. Interestingly, 23% reported that unidentified 'Others' had the most influence. In addition, there was a moderate negative correlation between 'Family' and 'Others' ($r_s = -0.489$, $p < 0.01$ two tailed) which suggests that those who rate their family as having the greatest influence, rate 'Others' as having little influence and vice versa. This requires further examination.
- * 74.3 % indicated that they had never considered a career in Scotland's largest employer.
- * For those who had there was poor recognition of the many career routes available to them - other than working as doctors, nurses or midwives.
- * This means that pupils in Scotland had little or limited knowledge of approximately 65,000 opportunities in the NHS.

1 Details of the motivational instrument are contained in Appendix 4.

Other findings

Pupils were asked how likely it was that they would enter college, university or employment. An initial analysis suggests there is a positive correlation between choosing college or entering employment, while a negative correlation exists between choosing university and choosing college; and between choosing university and entering employment. One possible interpretation of this is that pupils may be undecided about choices between entering college or employment but those who plan to go to university are more set in their future plans. Initial Chi-square tests indicate that there is a significant association between WHAN area and decisions about whether college is likely and also between WHAN area and whether employment is likely after leaving school.

Measures of multiple deprivation² suggest that we are targeting pupils from locations that suffer relative deprivation when compared to the national average as reported in the table below.

	West	North	Tayside	Fife	East	Scotland
Most affluent	0.3		0.7	2.4		9.0
2	3.3	13.3	7.2	13.0	13.8	16.8
3	11.0	42.5	41.8	13.9	10.6	24.3
4	16.8	43.7	6.0	46.1	51.4	22.3
5	25.9	0.5	17.6	20.0	24.2	12.4
6	30.4		16.6	4.4		9.4
Most deprived	12.4		10.1	0.2		5.8
% low social class*	22.2 (7.1)	18.2 (3.8)	21.3 (7.0)	19.9 (6.3)	20.7 (5.7)	17.3 (7.9)

* Mean/St. Dev.

Table 1: DEPCAT and % low social class by area

- * WHAN is reaching its target constituency in terms of, firstly, absence of a family tradition of post-school education and, secondly, relative social deprivation.
- * Differences in motivation relative to gender, to geographical area and to multiple deprivation have been noted.

Motivation

The baseline survey included a motivational inventory; details of which are contained in Appendix 4. Initial findings suggest that scores on the motivational constructs differ significantly by gender, although the effect differs by area³. The following table provides details. Blank cells indicate no significant difference by gender, while the presence of a label indicates a significant difference between males and females. For example, it can be seen that among pupils from the West area, Males have significantly higher mean scores for the motivational construct *To Know*.

² DEPCAT is calculated using figures from the 2001 census.

³ Although not reported here, differences also exist within areas at the school level

	West	North	Tayside	Fife	East
To Know	Male				
To Accomplish	Male				
To Experience			Female		
Identified		Female	Female		Female
Introjected			Female		
External Regulation	Male				
Amotivation			Male	Male	

Table 2: Responses, by area, related to Gender

In addition, with the exception of the constructs *To Know* and *To Accomplish*, differences in motivation by levels of multiple deprivation, as measured by DEPCAT exist. In general, the greater the affluence, the greater the levels of motivation. Given that, it is perhaps expected that the least affluent have higher levels of *Amotivation* than their more affluent counterparts. Moreover, those who had thought about a career in the health sector had significantly higher scores in all motivational constructs with the exception of those for *Amotivation* where the picture as expected is reversed.

For each of the seven motivational constructs, ANOVA tests confirm that significant differences exist between area means ($p < 0.01$). Post hoc tests using Tukey's HSD or Games-Howell confirm the following⁴:

To Know	Fife significantly higher than both North and West ($p < 0.01$)
To Accomplish	North lower than all other areas ($p < 0.01$); Fife higher than West ($p < 0.01$)
To Experience	West lower than Fife ($p < 0.01$); North lower than Tayside and Fife ($p < 0.01$); Fife higher than East ($p < 0.01$).
Identified	West higher than North and lower than East ($p < 0.01$); North lower than Fife and East ($p < 0.01$); Tayside lower than Fife and East ($p < 0.01$).
Introjected	West lower than Fife ($p < 0.01$); North lower than all other areas ($p < 0.01$).
External Regulation	North lower than Fife, West and East ($p < 0.01$); Fife higher than Tayside ($p < 0.01$).
Amotivation	North higher than Fife ($p < 0.01$).

Table 3: Motivational Constructs by area

As can be seen, mean scores on the constructs differ by area. However, this varies dependent upon the construct and the area and no clear pattern emerges. While these results are preliminary, a greater understanding of the role of motivation for education will be provided when results obtained in Standard Grade examinations are available and the relationship between motivation and academic attainment can be examined. In addition, the second baseline survey has now been distributed to the same pupils who completed the baseline (now in S5) and when completed and returned will allow an analysis of how, and in what ways, levels of motivation, future plans and interest in and knowledge of careers in the health sector, have changed over time. Dependent upon funding, the team proposes to add to the dataset through the incorporation of results at Higher Level that will allow another level of analysis.

4 If Levene's test of homogeneity of variance is not significant, Tukey's HSD is used, otherwise Games-Howell is used.



Event evaluation

Preliminary findings

- * At the time of writing, 2,155 evaluation sheets had been completed.
- * Females accounted for 58.9% and males 41.2%.
- * Mean age was 15.2 for females and 15.1 for males.
- * 49.5% had not considered a career in the health sector, however there were differences by gender. Chi-square tests reveal an association between gender and consideration of a future health career ($\chi^2 = 88.439$, $p > 0.01$) with females more likely than males to respond 'Yes'.
- * Only 37.2% of males responded 'Yes' compared to 60.7% of females.
- * Around a half responded to the supplementary questions asking 'If yes why?' and 'If no, why not?'

At each of the events, participants completed evaluation sheets.

In terms of types of careers mentioned, the largest groups reported they would like to be doctors, nurses (specifically midwives although other specialisms were mentioned) or reported they did not know. Otherwise, a range of careers were mentioned including dentists, surgeons, physiotherapists, psychologists, paediatricians, radiographers and speech therapists. Other responses were more vague, mentioning sciences, children, speech/language and various dentistry-related positions.

For those not interested in a health-related career, a number either did not know or had not thought about the future, while for others, squeamishness and associated feelings were considerations. A number of others stated that they were interested in other careers in other sectors of the economy; again, a wide range of careers was listed including architects, lawyers, policemen, fashion designers and even one who wanted to be a politician.

Of specific interest in terms of evaluation, was the number who after attending an event, now considered a career in the health sector (Yes = 55.6%). Once again, there were differences by gender. Chi-square tests reveal an association between gender and a future career in the health sector ($\chi^2 = 111.636$, $p > 0.01$) with females again more likely than males to respond 'Yes'. 67.7% of females and 41.5% of males responded 'Yes'.

- * Attendance at WHAN events significantly increases interest in a health career.
- * There exists differences in this interest level according to gender.
- * The individual decision that a healthcare career is not desirable is a positive result as it can avoid future attrition.

Of perhaps greater interest to the overall project is whether or not we can see a change in interest as a result of attending events. In order to do this we first filter out all those who had already indicated interest in a health career. Of those who selected 'No' originally, 79.4% still remained unconvinced of a career in the health sector, while 20.6% had changed their mind as a result of the event attended. There was still a significant association between gender and career intentions ($\chi^2 = 7.188$, $p > 0.01$) with females (25.4%) still more likely than males (17.4%) to have changed their minds as a result of the events. In addition, 8% of those who had previously indicated an interest in a career in health appeared to have changed their minds as a result of attending events. The above results suggest that the events are having a positive impact and in the light of those changing their mind, the events may also be useful in providing information that allows some to reconsider their earlier interest.

Overall and perhaps encouragingly, only 6.4% reported that they were 'Not at all' or 'Not very' interested in the event they had attended. Moreover, those who originally said 'Yes' to a health career reported a greater level of enthusiasm compared to those who said 'No'; and, those who originally said 'No' – and who subsequently responded 'Yes' - after the events, reported greater enthusiasm for the events than those who were still not interested in a health career. Once again there are gender differences.

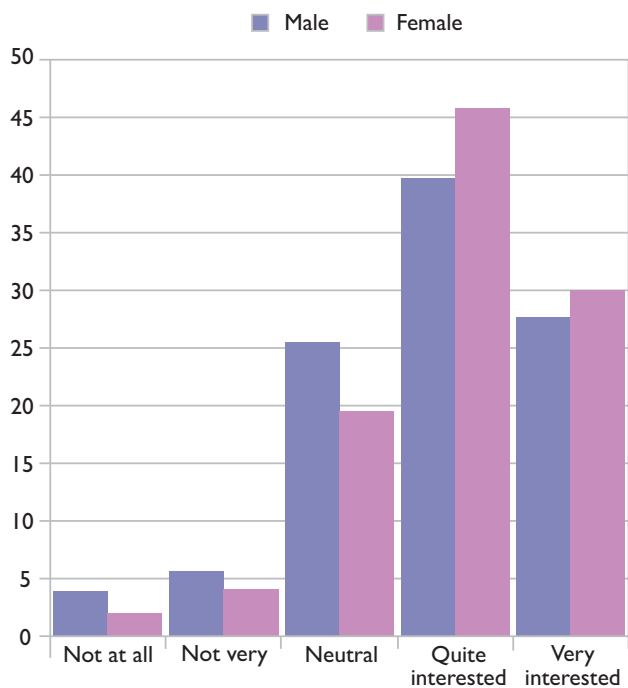


Figure 2. Event Evaluation, Gender-based response

Overall, girls found the events more interesting than boys. Statistical testing using the Mann-Whitney test confirms the result as significant at better than the 1% level.

In relation to the popularity of the wide and varied range of activities offered, it would appear that pupils appreciated interactive events more than talks and presentations. However, this requires a more detailed analysis in order to gain a better understanding of the role of particular activities.

Event evaluations are still being processed and the analysis is ongoing. As noted above, it is hoped that, by using a technique known as probability-matching, it will be possible to link records from the event evaluations to the baseline survey data - thus allowing a more detailed analysis to be undertaken. A flow chart of the evaluation timetable in relation to WHAN practice is included as Appendix 5.





Management and Finance

As the acronym suggests, WHAN is a network of professionals from education and health - a network both local and national. A Network Management Group (NMG) of representatives from participating universities and colleges, local authorities, careers staff and representatives from the local Wider Access Forums and from the NHS leads each of the WHAN areas. The NMGs are central to the success of WHAN as they represent the patterns of educational provision across their region and provide a united voice when discussing strategies with stakeholder bodies.

The WHAN National Executive Committee (NEC), chaired by Professor Mary Ann Lumsden of the University of Glasgow Medical School, is the decision making body for WHAN. It monitors the progress of the project and is a forum where issues brought forward from each of the NMGs can be discussed in appropriate depth.

Professor Sir Graham Catto, President of the GMC, chairs the WHAN National Advisory Committee (NAC). Its role is to provide strategic expertise and guidance to the NEC. The members of these committees are listed in Appendix 1.

The pilot project for WHAN - the Working in Health Access Project (WHAP) – ran from 2003 to 2006. Funding was provided by the Scottish Funding Council, the major funder, and by NHS Education Scotland (NES). Further, a small grant was provided by the Scottish Executive.

WHAN runs from 2006 to 2009 and costs a little under £1,000,000, provided by the Scottish Funding Council, the Health Department of the (then) Scottish Executive and by specific sums provided by, first, the West of Scotland Wider Access Regional Forum, for work developed specifically in its area of operation, and, secondly, by the Fife and Tayside Wider Access Regional Forum, for area work likewise. Small sums were made available by local authorities, most substantially Argyll and Bute Education Department in its collaboration with *Determined to Succeed*. The University of Glasgow is the lead institution for WHAN.

WHAN more than doubled the number of schools involved in the WHAP pilot and, significantly, built on that experience to provide a much wider range of services tailored to meet both local and common needs. A significant feature of both the pilot (unsurprisingly) and of WHAN itself has been the intense level of evaluative activity, both formative and summary, required by the project's governing bodies. This is considered in the previous section.

While relatively cost-effective, the significant feature of WHAN expenditure has been the 'in-kind' contribution of the participating agencies - where WHAP practice was initially embedded - and, most importantly, the contribution made by local authorities, institutions, health service departments and individuals - whether field practitioners or WHAN committee members. None of these individuals and field sections – essential to the carrying out of WHAN practice – has presented an account for expenses or costs whether for travel, for time or for resources.

The latter illustrates an important facet of future possibilities. The major category of expenditure for WHAN has been Staffing - resourcing those WHAN staff members who have acted as facilitators, integrators and examples. The remaining major category of expenditure is that of Evaluation. This evaluation should continue, with further financial support, into 2010 in order to track the outcome destinations for the initial participants. Consideration of the future usage of WHAN practices might then focus on the best way forward for assisting other agencies take up and implement the outcomes of WHAN.

The Way Forward?

Working across the range of skills needed for Scotland's Health Services?

So how can WHAN help make Scotland a healthier, wealthier, fairer and stronger place? It can contribute to these priorities in a number of ways. WHAN, as a proactive and dynamic organisation, has an aspiration to further develop its partnership work by promoting new linkages that help contribute to the skills development priorities in Scotland. Working with colleges, schools, local authorities, the SQA, health boards, regional wider access forums, NES Scotland, Careers Scotland and Skills Development Scotland, WHAN can effectively and efficiently position the health sector as being an excellent career destination with real professional development opportunities.

It is worth noting that there is a large pool of adults and mature students wishing to prepare for employment in the health sector. Developing health-related access programmes lasting one month to one year in full-time and part-time modes would help steer many people towards a career in health. This new market would be informed, focused and able to make positive choices about the future. It may also help to address and impact high attrition rates in nursing programmes by offering more relevant access to programmes.

A Working in Scotland's Health Services project would continue to act as a link between the numerous organisations working in this area in order to:

- * Raise aspirations to assist young people to reach their full potential.
- * Promote the key skills for health in its stakeholder group - communication, team working and numeracy within a healthcare context. These would be short courses to provide creative and flexible delivery methods.
- * Carry on and expand the work of developing skills for health programmes in schools.
- * Motivate pupils to consider a career in health by hosting interactive seminars and workshops.
- * Work more closely with local health boards to identify and prioritise the type of workforce that they will need in the future.
- * Develop mentoring programmes that will give many more people the opportunity to interact with a health professional in person and via the web.
- * Where appropriate, calibrate its interventions to focus on Framework Grades 1-4 to meet short to medium term workforce planning issues.
- * Work with more schools and colleges in Scotland.
- * Continue to embed the concept of the health sector as the career destination of choice for school leavers.
- * Promote access and diversity to the NHS from under-represented groups.
- * Collaborate with colleges to develop Access to Assistant AHP Programmes.
- * Act as a training and facilitation resource for agencies seeking to develop awareness-raising initiatives.
- * Reduce the timelines from the first intervention to entry into employment.
- * Provide very good value for money.





Conclusions

WHAN set out to raise awareness of health-related careers and courses:

- * It identified a lack of awareness of health-related careers.
- * It organised activities that engaged the participants, improving their understanding of career pathways in health, so empowering them to make informed choices.
- * It identified good practice that could be utilised in other regions around Scotland to maximum effect.

WHAN built networks of relevant agencies. These included universities, colleges, health and education organisations that all hold common aims and ambitions in regard to the prospects of young people. It acted as a link between them to facilitate cohesion and prevent inappropriate overlap of activities.

WHAN used evidence-based methodology and evaluated its activities thoroughly and carefully to identify the best strategies to achieve its aims.

WHAN enhanced knowledge of science by incorporating activities into its programmes which gave information on health careers as well as increasing an interest in learning about science in order for school pupils to be able to follow their desired career paths.

WHAN has added considerably to the area of widening participation and to raising aspirations in young people:

- * It has been proactive rather than reactive. Activities are planned and not simply 'ad hoc'.
- * It has embedded many activities that are rolling forwards (but need funding to sustain them).
- * There is scope for the future as WHAN strategy allows planning and development.
- * The co-ordinated approach facilitates best use of resources and the incorporation of more schools across Scotland.

WHAN principles need to be maintained to meet the future needs of health provision in Scotland. The following examples indicate what would be lost should WHAN principles not continue to be championed:

- * Loss of prior knowledge, in schools and elsewhere, of what health careers involve - vitally important in decreasing dropout in professions such as nursing.
- * The project provides the largest database of its type in Scotland and lends itself to longitudinal study that will provide valuable information to Government and other organisations throughout Scotland.
- * Failure to develop the admission strands facilitated by tracking of WHAN participants and linking with SQA exam results would further reduce the information required to guide future health professionals.

WHAN has successfully achieved its three goals:

- * To promote skills development.
- * To improve fairness.
- * To use evidence –based principles to govern practice.



Appendix I

WHAN Governance

The National Advisory Committee (NAC)

Professor Sir Graeme Catto (Chair) - President, General Medical Council
Professor Mary Ann Lumsden - University of Glasgow
Christine Mathers - Scotland's Colleges
Professor Keith Millar - University of Glasgow
Professor Mike Osborne - University of Glasgow
Morag Campbell - Scottish Funding Council
Richard Skerrett - Universities and Colleges Admissions Service (UCAS)
Colin Robertson - Scottish Government
Dr John Blicharski - NEC Rep
Fiona Andrews - NEC Rep

Former members of NAC

Irene Finlayson - UCAS
Carolyn Davidson - Scottish Qualifications Agency
Dr Richard Simpson MSP
Professor Michael Farthing - St George's Medical School
Peter Lloyd - Scottish Executive
Lynn Anderson - Scottish Executive
Dorothy Elsey - Scottish Executive

The National Executive Committee (NEC)

Professor Mary Ann Lumsden (Chair) - University of Glasgow
Professor Mike Osborne - University of Glasgow
Dr Christine Kay - University of Aberdeen
Dr Muir Houston - University of Glasgow
Alan McLachlan - Queen Margaret University
Pam Turner - South East WHAN
Dr John Blicharski - University of Dundee
Fraser Keir - University of St Andrews
Fiona Andrews - University of Glasgow
Margaret Hamilton - Langside College

Former members of NEC

Gail Fertacz - Forth Valley College
Stan Farrow - University of St Andrews
Dr Barbara Golden - University of Aberdeen
Robert Boyd - Perth College
Dr Donald Thomson - University of Edinburgh
Ruth Stewart - University of Edinburgh
Professor Jacky Reid - University of Glasgow
Lesley McColl - Angus College
Joan Doherty - Dundee College
Dr David Jackson - University of St Andrews
Professor Keith Matthews - University of Dundee
Dr Nick Part - University of Dundee
Colin Stead - University of Edinburgh
Bill Rattray - Aberdeen College

Appendix 2

Careers being promoted by WHAN

Anaesthetist	Art Therapist
Audiological Scientist	Biomedical Scientist
Cardiac Physiologist	Cardiographer
Clinical Biochemist	Clinical Cytogeneticist
Clinical Embryologist	Clinical Engineer
Clinical Immunologist	Clinical Microbiologist
Clinical Scientist	Dental Hygienist
Dental Nurse	Dental Technician
Dental Therapist	Dentist
Dietician	Doctor
Laboratory Assistant	Medical Illustrator
Medical Physicist	Medical Technologist
Midwife	Molecular Geneticist
Nurse	Nursing Assistant
Occupational Therapist	Occupational Therapy Assistant
Orderly	Operating Department Practitioner
Optician	Optometrist
Orthoptist	Orthotist
Paramedic	Pathologist
Perfusionist	Pharmacist
Pharmacy Technician	Phlebotomist
Physiological Scientist	Physiotherapist
Podiatrist	Prosthetist
Psychologist	Radiographer
Speech and Language Therapist	Surgeon
Vet	Veterinary Nurse

Appendix 3

Membership of Network Management Groups

Institutions in bold type are the initial lead institution for each network area.

West of Scotland

University of Glasgow (and national Project lead)
Glasgow Caledonian University
University of Strathclyde
University of the West of Scotland
Langside College
Clydebank College
Cardonald College
James Watt College
John Wheatley College
Stow College
West of Scotland Wider Access Forum
Greater Glasgow and Clyde NHS
SQA
Careers Scotland

Tayside

University of Dundee
University of Abertay
Dundee College
Angus College
Fife and Tayside Wider Access Forum
Dundee City Council
Perth & Kinross Council
Angus Council
NHS Tayside
Careers Scotland

Fife

University of St Andrews
Carnegie College
Perth College
Elmwood College
Adam Smith College
Fife and Tayside Wider Access Forum
Careers Scotland
Fife Council

North of Scotland and the Highlands and Islands

University of Aberdeen
The Robert Gordon University
University of the Highlands and Islands
NHS Grampian
NHS Highland
Lifescan Inverness
Highlands and Islands Enterprise (STEM)
Royal College of General Practitioners (North Scotland)
Aberdeen City Education Department
Highland Council Education Department
Moray Council Education Department
Aberdeen College
Inverness College
Aspire North

5. South East and Central Scotland

Queen Margaret University
University of Edinburgh
Borders College
Forth Valley College
South East Forum
Careers Scotland
Borders Council

From 2003 (WHAP) to 2008 the evaluation team for WHAN was based at the Institute of Education, University of Stirling. In 2008 the evaluation team moved to the Department of Adult and Continuing Education (DACE) at the University of Glasgow.

Thanks are due to the agency representatives and interested parties who served on these local Network Management Groups and who governed the work of their respective areas.

Appendix 3a

List of Schools

North of Scotland NMG

(* indicates limited involvement)

Aberdeen City

Hazelhead Academy*
Kincorth High School*

Aberdeenshire Council

Banff Academy
Fraserburgh Academy
Westhill Academy

Eilean Siar

The Nicolson Institute*

Highland Council

Culloden Academy
Farr High School*
Kinlochbervie High School*
Kinlochleven High School*
Lochaber High School
Nairn Academy
Tain Royal Academy
Thurso High School*
Wick High School

The Moray Council

Buckie High School

Shetland Council

Aith Junior High School
Anderson High School
Brae High School
Sandwick Junior High School
Scalloway Junior High School

Tayside NMG

Angus Council

Arbroath Academy
Arbroath High School
Brechin High School
Forfar Academy

Dundee City

Baldragon Academy
Braeview Academy
Menzieshill High School
Craigie High School
St John's High School
St Paul's Academy

Perth and Kinross

Blairstown High School
Perth Grammar School
Perth Academy
St Columba's High School, Perth

Fife NMG

(the following schools were WHAP/WHAN 'core' schools but Fife WHAN has now extended its activities to all 19 secondary schools in Fife)

Fife Council

Auchmuty High School
Beath High School
Buckhaven High School
Glenrothes High School
Glenwood High School
Kirkcaldy High School
Kirkland High School and
Community College
Lochgelly High School
St Andrew's High School, Kirkcaldy
St Columba's High School, Dunfermline
Viewforth High School
Woodmill High School

South and East of Scotland NMG

Borders Council

Hawick High School
Jedburgh High School

Clackmannan Council

Alloa Academy
Lornhill Academy

Falkirk Council

Bo'ness High School
Braes (Falkirk) High School
Denny High School
Falkirk High School
Grangemouth High School

Stirling Council

Wallace High School
Bannockburn High School
Stirling High School

West of Scotland NMG

Argyll and Bute

Campbeltown High School
Dunoon Academy
Hermitage Academy
Islay High School
Lochgilphead High School
Oban High School
Rothesay Academy
Tarbert Academy
Tiree High School
Tobermory High School

East Ayrshire

James Hamilton Academy
Kilmarnock Academy

Glasgow City

Hillhead Secondary School
Knightswood Secondary School
Lourdes Secondary School
Bannerman Secondary School
Cleveden Secondary School
John Paul Academy
St Thomas Aquinas' Secondary School

Inverclyde Council

St Columba's High School (Gourock)
Port Glasgow High School
Inverclyde Academy

North Ayrshire

Auchenharvie Academy

North Lanarkshire

Calderhead High School
St Andrew's High School, Coatbridge

Renfrewshire

Linwood High School

South Ayrshire

Ayr Academy
Girvan Academy

South Lanarkshire

Stonelaw High School
Calderglen High School

West Dunbartonshire

Clydebank High School
St Andrew's High School, Dumbarton

Appendix 4

The AMS-28 Scale

The AMS-28 scale (Vallerand et al. 1992) is based on self-determination theory and is composed of 28 items subdivided into seven sub-scales which assess three types of intrinsic motivation; three types of extrinsic motivation; and amotivation (detailed below).

Motivation type	Sub-scale
Intrinsic	Motivation to know: when people perform an activity for the pleasure and satisfaction of learning something new. Motivation to accomplish things: when people perform an activity for the pleasure of feeling efficient and competent. Motivation to experience stimulation: when people carry out the activity for the simple pleasure of doing it.
Extrinsic	External regulation: where people regulate their behaviour to obtain a reward or avoid punishment. Introjected regulation: when people exert pressure on themselves to regulate their behaviour. Identified regulation: when people judge that engaging in a particular activity is important and behaviour is a result of their choice.
Amotivation	Amotivation: when people are unable to perceive motivation and they may carry out their activity but involvement is mechanical; questioning the activity and eventually abandoning it.

Table 4: - The AMS-28 Scale

Intrinsic motivation is seen as motivation to take part or complete a task or activity for its own sake; extrinsic motivation when an activity or task is undertaken for external reward or praise; and, amotivation which occurs when individuals are unable to perceive the motives underlying their actions.

The scale has also been subject to testing in the New Zealand context by Lavery (1999). As with the survey revised for the WHAN project, the items in the study by Lavery have been revised slightly to better reflect the language of the specific context.

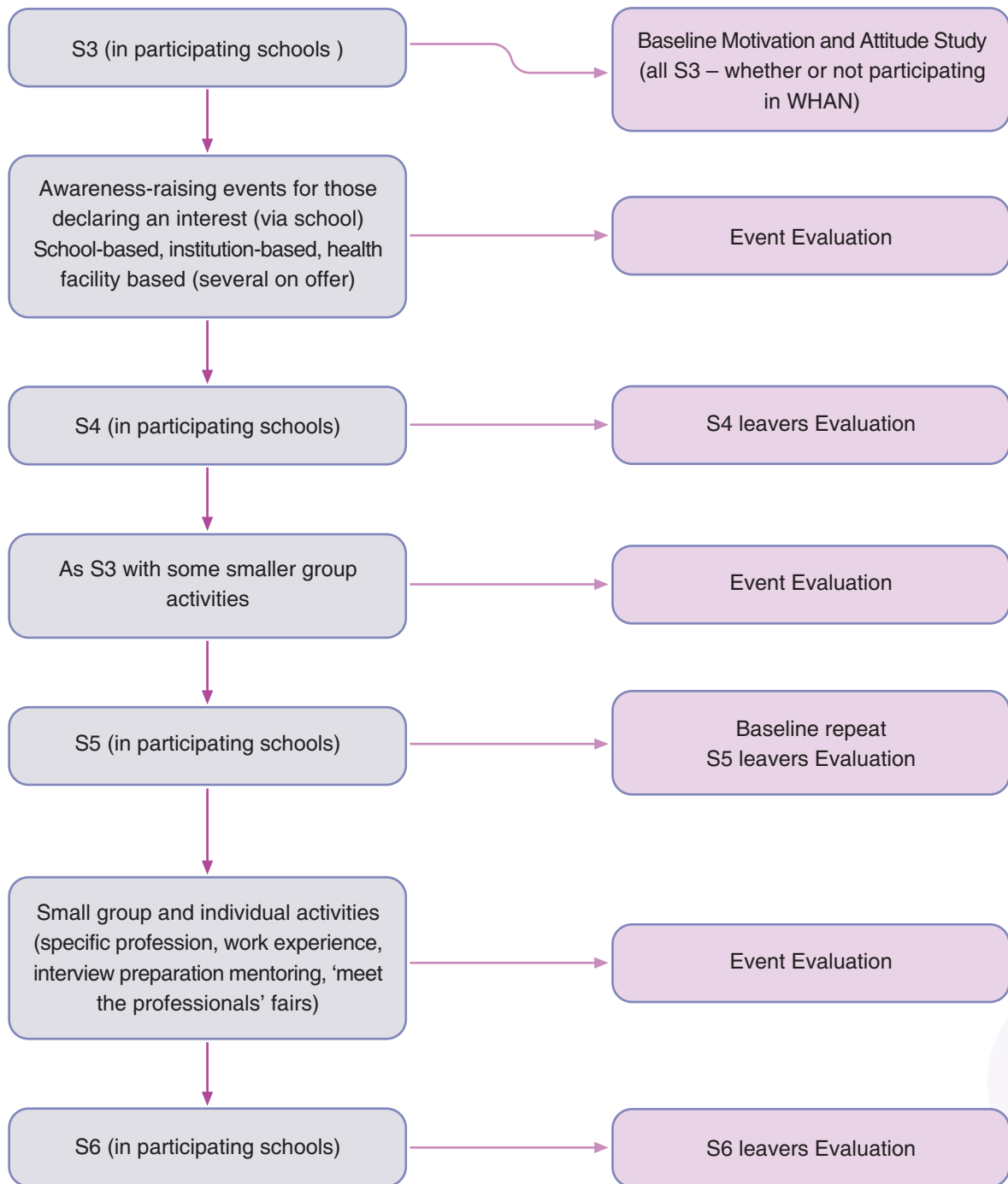
The scale is suitable for repeated delivery and will allow the project to measure changes in motivation over time and as such will allow us to reflect on the role of WHAN activities in increasing motivation to succeed at school.

Lavery, L. (1999) *Ethnic Group Differences in the Academic Motivation of University Students*. <http://www.aare.edu.au/99pap/lav99255.htm>

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). *The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education*. *Educational and Psychological Measurement*, 52, 1003-1017.

Appendix 5

Flow Chart for WHAN Practice and Evaluation



NB: 2006/7 - first group S3;
2007/8 – first group S4, second group S3;
2008/9 – first group S5; second group S4; third group S3

The Face of WHAN

The present team of WHAN Network Liaison Officers (NLOs)



Morna Annandale,
NorthWHAN



Hellen Matthews,
NorthWHAN



Gordon Black,
TaysideWHAN



Fiona Dear,
TaysideWHAN



Vicky Torrance,
FifeWHAN



Alison Anderson,
WestWHAN



Fiona Harrison,
WestWHAN



David Johnston,
WestWHAN



Frances Todd
NationalWHAN
Administration

Not pictured

Caroline Gerbrandy-Baird,
SouthandEastWHAN

Helen Woodhouse,
SouthandEastWHAN

Former WHAP/WHAN staff who contributed much to the development and operation of the project:

Alice Smith (Fife and Tayside)

Dr Margot McBride (Fife)

Neil Glen (Tayside)

Dr Karen McGavock (WHAP Development Officer)

Dr Deborah Shaw (South and East)

Fiona McCracken (South and East)

Lisa Prudom (Fife)



In adherence with WHAN's strong commitment to sustainability, we actively research and solicit quotes on environmentally preferable goods and services. Permission has been obtained for the use of all photographs displayed in this publication. All of those featured are staff or participants in WHAN events.



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