

The Apprenticeship Debate

Briefing Paper, 22nd March 2018

Overview.....	2
Background to apprenticeships.....	3
What is an apprenticeship?	3
What is changing?.....	3
How do they work in practice?.....	4
What do the levels mean?	5
Funding and the Apprenticeship Levy	5
Conservation Apprenticeships	7
Conservation Career Paths	7
Conservation Technician Standard.....	8
Conservator Standard	9
Other Heritage Sector Apprenticeships	10
Apprenticeship terminology.....	12

Overview

The 'Apprenticeship Debate' has been supported by the 'Heads of Conservation & Science Laboratories in UK National Museums, Galleries & Libraries' and the Institute of Conservation. The event draws together Conservation professionals from across the UK to engage in debate around the development of Apprenticeships for the Conservation Profession, to air concerns and to ensure that when developed they are fit for purpose for the profession.

This event follows on from the work of the Conservation Trailblazer working group which was formed in early 2017 to spearhead the development of Apprenticeships for the Conservation profession. The group is working as a sub-committee of the wider Historic England led 'Historic Environment' Trailblazer group which is developing Apprenticeship Standards for Archaeology, Advisory Roles and Conservation.

The working group includes representation from across the sector, including national institutions, private sector representation as well as education providers.

British Library
Cliveden Conservation
English Heritage
Fitzwilliam Museum
Hall Conservation
Historic England
Historic Royal Palaces
Holy Well Glass

Museum of London
Tate
The National Archives
University College London
University of Lincoln
University of Manchester Museums
Victoria & Albert Museum
West Dean College

The group has identified two job roles within the Conservation Sector for which Apprenticeships are being developed.

Conservation Technician: A 'level 4' standard which is designed to cover the roles of: Conservation Technician, Collections Conservation Technician, Conservation Science Technician, Specialist Conservation Technician (Specialisms such as Architectural, Digital Preservation Paper, Photographic, Preventive, Stone or Time-based media may be linked to the job title)

Conservator: A degree apprenticeship which will include a full master's degree from an existing Higher Education institution. The standard is designed to cover the roles of: Conservator, Specialist Conservator (e.g. Digital Preservation, Metals, Paper, Preventive, Paintings, Photographic, Stone, Time-based media).

Background to apprenticeships

The following section provides some initial background information on apprenticeships, how they work in practice and how they are funded. For further information please visit the GOV.UK website.

What is an apprenticeship?

An apprenticeship is a paid job, which includes a pre-agreed training package to enable someone to perform a particular job role. At a minimum an apprenticeship must include:

- Contract of employment
- 20% off- the- job training
- Minimum of 12 months
- Available to all (16-year olds and older)
- Delivered from level 2 (GCSE level) through to level 7 (Post graduate)
- English and Maths functional skills qualifications where relevant.

What is changing?

The latest significant developments, known as 'Trailblazers' came out of the 2012 Richard Review which saw a move away from a system driven by the qualification or training provider, to one in which the content of apprenticeships is developed by employer groups. The intention of this has been to ensure that the content of an apprenticeship is matched to the needs of employers, as well as ensuring that those completing the apprenticeships come out with the skills to ensure that they can compete effectively with others in the job market.

These 'Trailblazer' groups are working to produce what are called 'Standards', which are short documents that outline the key knowledge, skills and behaviours expected of someone performing a particular role. In order to be able to fulfil these standards, learners must undertake 20% off-the-job training (which could take many forms but might include a combination of formal learning, training provided/led by the employer and work shadowing). Once the candidate is ready (after at least twelve months) they must then take an end-point assessment to formally complete their apprenticeship.

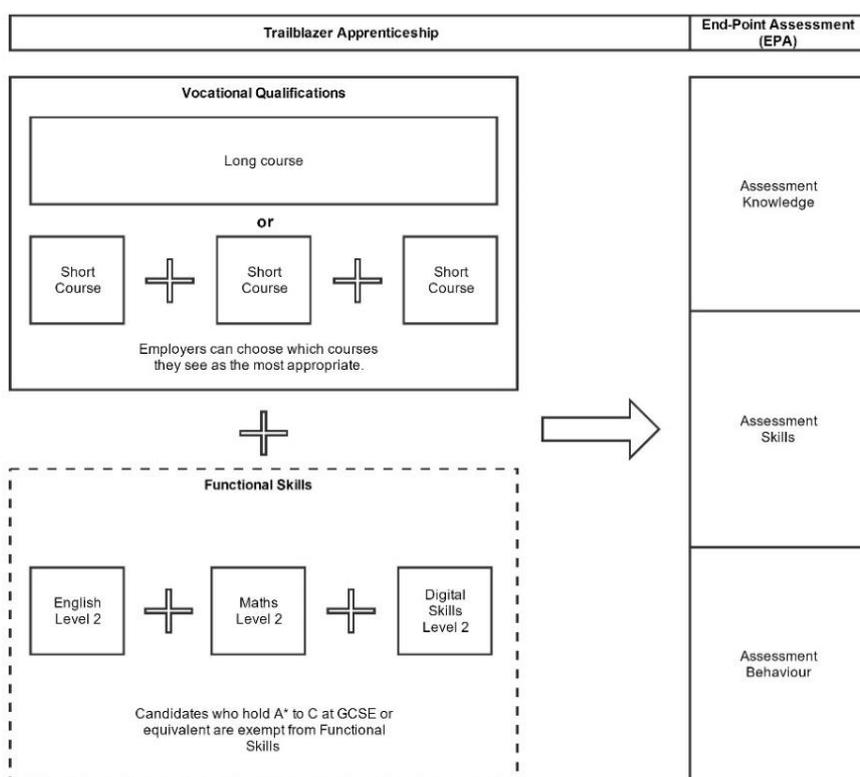
As well as helping to improve the overall quality of delivery, this approach is trying to raise the profile of apprenticeships, which have been dogged by a negative public image over recent times as being of lesser value than a strictly academic offer. The 'Trailblazers' firmly state the intention to shake up the qualifications and focus on end-point assessment, so as to offer greater confidence in those completing the apprenticeships as being fit to practice. At the same time, the Government has set ambitious targets to increase the numbers undertaking apprenticeships, with its target of three million starts by 2020 complemented by a public-sector target of 2.3% of the workforce over the same period.

How do they work in practice?

Compared to the old 'framework model', 'Trailblazer' apprenticeships do not list any specific qualifications as part the delivery (unless it is a requirement of the sector). Once an employer has identified a staff member or a role for whom an apprenticeship is appropriate they will agree the actual training package with the training provider.

This training must meet the requirement of delivering 20% off-the-job training, although it would be expected that much of this learning would take place in the workplace. It is at this point that the employer, apprentice and training provider will agree the course content and length of the apprenticeship.

Note that the training for the degree apprenticeship for Conservator being developed by the working group must include a full master's degree as part of the training.



All apprenticeships must now also have an independent End-Point Assessment to be carried out by an organisation which has not had any involvement of the delivery of the apprenticeship. It is not until the apprentice has completed this element that they can be deemed to have passed their apprenticeship.

Candidates must also have achieved functional skills (i.e. English, Maths and often Digital Skills) in order to be able to complete them, and candidates who come in to the apprenticeship without these qualifications must achieve them during the apprenticeship.

How is an apprentice recruited?

Participating employers can either take on new staff or can put existing staff through an apprenticeship. If taking on new staff, they must have a contract of employment for the duration of the apprenticeship which is for at least 30 hours per week. They must also be paid at the national minimum wage for their age bracket. It is possible to pay an apprentice who is 16-18 years old, or older but in their first year of an apprenticeship at the apprenticeship minimum wage (£3.50 / hour). In practice it would be expected that the salary level is comparable to other similarly skilled positions within the organisation.

To recruit a new apprentice, the employer can either recruit for the position themselves and then work with a training provider to identify the appropriate training package, or they can work with a training provider, many of whom help with the recruitment.

Training providers must be registered. Suitable providers can be found on the GOV.UK website.

What do the levels mean?

Apprenticeships can be delivered from level 2 through to level 7.

Level	Qualifications
Level 2	GCSE at Grade A*, A, B or C; O level A, B or C.
Level 3	A levels, International Baccalaureate Diploma, Access to Higher Education Diploma
Level 4	Certificate of Higher Education(CertHE), Higher National Certificate (HNC)
Level 5	Diploma of Higher Education (DipHE), Higher National Diploma (HND)
Level 6	Bachelor's Degree, Graduate Certificate, Graduate Diploma
Level 7	Master's Degree, Postgraduate Certificate, Postgraduate Diploma

Funding and the Apprenticeship Levy

Each apprenticeship is assigned a different funding band, this sets the top amount of money which the Government will be prepared to pay for the training costs. The Conservation Technician Standard has been indicatively assigned a funding cap of £9,000. A funding band is still pending for the Conservator Standard.

How this amount of money is paid depends on the size of the employer taking on the apprentice. This amount is defined by their total salary bill.

Pay Bill under £3 million / year (small employer): The employer pays 10% of the agreed training cost. The remaining 90% is paid by the Government directly to the training provider. Organisations with fewer than 50 employees make no contribution to training a 16-18-year-old.

Thus, a small employer would have to pay £900 to train an apprentice Conservation Technician.

Pay Bill over £3 million / year: From April 2017 these employers started paying the Apprenticeship Levy, which is put into a separate pot which can only be used to pay for apprenticeship training (i.e. any qualifications and other formal learning). The employers must pay the full cost of the training out of this pot of money. Once the money is spent, they then revert to the same model as small employers.

The pot of funding for the Apprenticeship Levy is worked out at 0.5% of the total pay bill less a 'levy allowance' of £15,000 over the year. The Government then tops up this funding pot by 10%. For example, an employer with a pay bill of £5 million would have a total levy pot of £11,000 and an employer with a pay bill of £25 million would have a pot of £121,000.

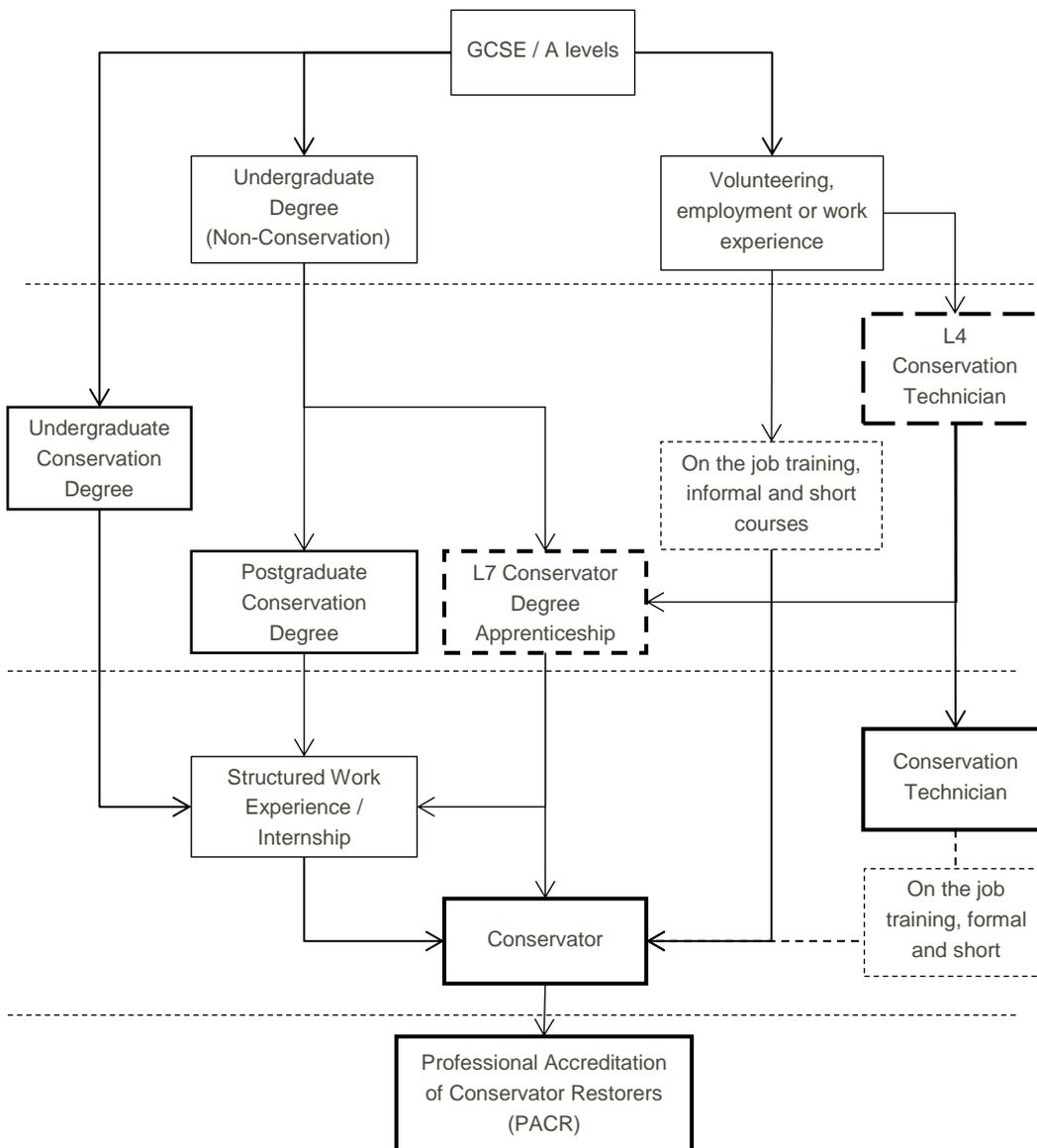
Conservation Apprenticeships

Whilst there is a well-developed academic route into the conservation profession, the vocational route has been more variable. Certain parts of the profession have a long history of taking on apprentices, however there has generally been a lack of formal training to support this area develop further. Given the Government backing, and availability of funding, Trailblazer apprenticeships offer the opportunity to formalise this route into the sector.

Furthermore, with diversity high on the agenda, the development of alternative routes into the profession can work to actively increase participation in the profession.

Conservation Career Paths

Below we have outlined a simplified version of the differing routes into conservation to highlight how apprenticeships could work alongside existing delivery.



Conservation Technician Standard

- ✓ Proposal Approved
- ✓ Standard Approved
- ✓ Funding Band: £9,000
- ✓ End-Point Assessment Plan in development.

The standard is to be delivered at level 4. It has now been approved as a standard, and the group are currently working on developing the End Point Assessment Plan. The following Knowledge, Skills and Behaviours have been outlined in the standard:

	SKILL The technician will:	KNOWLEDGE AND UNDERSTANDING The technician will know and understand:
Assessment of materials, objects, and sites	<ul style="list-style-type: none"> • Use technical information in the course of practical projects. • Handle objects (such as sculpture and textiles) according to the specified handling guidelines for the item, or where these are not available, according to the requirements of experienced colleagues • Assess condition and possible risks to an item in collaboration with supervisor. 	<ul style="list-style-type: none"> • The cultural, historic, and spiritual context of objects and structures and how to operate within these frameworks. Examples might include work on human remains or objects of religious significance (e.g. not using materials derived from pigs on Jewish or Islamic objects) • The wider heritage contexts in which conservation is carried out and how conservation practices and their heritage context can affect one another • The handling procedures and equipment that might be required e.g. in moving collections or objects or differing options for digital archives. • Agents of deterioration • The difference between active and historic deterioration
Conservation options & strategies	<ul style="list-style-type: none"> • In consultation with a conservator, select methods and materials appropriate to the object and the work to be carried out e.g. to process digital artworks, to clean objects. • Test methods for effectiveness before implementing them e.g. Use of monitoring equipment to check storage conditions or checking software for digital art. 	<ul style="list-style-type: none"> • Relevant statutory, quality and policy standards within own area of work. • Different materials, structure and use of objects and structures in their care e.g., the different structures of books from a range of time periods and geographical areas, particularly in relation to display requirements and digitisation. • Appropriate environmental conditions for the objects in their care.
Conservation Measures	<ul style="list-style-type: none"> • Carry out interventive or preventive conservation measures in agreement with supervisor. This could be cleaning of objects and historic interiors, monitoring insect pests in collections or more specific tasks such as condition checking the resolution of digital artwork to assess correct equipment or adjust coding. • Select tools and equipment related to the brief e.g. in the dry cleaning of an object, the choice between a soft brush, or a chemical sponge or conservation vacuum cleaner. 	<ul style="list-style-type: none"> • The range of conservation measures from preventive care to interventive treatment carried out within area of practice • Baseline estimates of the time and resources needed to complete each task • How to evaluate methods for achieving the aims and deliverables. • How to use specialist equipment. e.g. those used for environmental monitoring or training in software and coding for time-based media. • How to record data using specialist equipment.
Organisation & Management	<ul style="list-style-type: none"> • Complete and maintain records. This could also include records of interventive treatments, pest management programmes, environmental conditions and object locations as well as on the instillation, play methods and archiving of digital art. • Carry out procedures for risk assessment, management, and mitigation • Provide information and advice through demonstration and explanations • Prioritise and plan own workload 	<ul style="list-style-type: none"> • The importance of record keeping and data management procedures in their work. • Legal requirements and obligations relating to health and safety, employment and contract law and international agreements e.g. such as the regulations surrounding use of in the use of specific chemicals used in the routine cleaning of objects.

Personal Professional Development	<ul style="list-style-type: none"> Remain current with advances in the body of knowledge and conservation practice for the specific field. Maintain, improve and develop their skills. 	<ul style="list-style-type: none"> How to develop a personal development plan for learning and self-development with realistic but challenging objectives How to keep a CPD log How to select and apply appropriate learning techniques and methods.
Judgement and Ethics	<ul style="list-style-type: none"> Be responsible and apply professional ethics in the execution of their practical work. Be responsible and apply professional ethics in dealings with the public, employers, clients, and colleagues. 	<ul style="list-style-type: none"> Professional judgement and ethical behaviour in their area of practice. The appropriate professional body's code of conduct and how to observe it in the workplace. The limits of their own understanding, abilities and responsibilities, and how to practice within them. i.e. when to seek support of the qualified conservator.

Conservator Standard

- ✓ Proposal Approved
- ✓ Standard submitted
- ✓ Funding Band: TBC

The standard is to be delivered at level 7 and must include a full master's degree. It has now been approved as a proposal and following consultation the standard was submitted for approval in February 2018. The following Knowledge, Skills and Behaviours have been outlined in the standard:

	SKILL The Conservator will be able to:	KNOWLEDGE AND UNDERSTANDING The Conservator will know and understand:
Assessment of materials, objects, and sites	<ul style="list-style-type: none"> Assess the impact of the environment e.g. the temperature and light levels and its potential to cause changes to objects and collections. Assess the physical nature and condition of materials and collections. Assess the historical and cultural significance of cultural heritage materials. Undertake risk assessments on cultural heritage material e.g. if preparing an object for exhibition they need to be able to judge the vulnerability of the object and identify possible damages that might occur. Consult and work with other allied professionals e.g. a wall paintings conservator working within a building may work closely with architects and builders. 	<ul style="list-style-type: none"> The agents of deterioration and materials science. How objects may have been changed or damaged The wider cultural and historic significance of objects Conservation theory.
Conservation options & strategies	<ul style="list-style-type: none"> Identify and evaluate conservation options Advise on any legislation, official guidance or organisational policy that affects areas of conservation practice. E.g. COSHH Work effectively with others including conservators, clients and stakeholders (such as owners or curators) to agree course of action Identify when no further action should be undertaken to an object e.g. if the item is too fragile Prioritise objects for treatment. 	<ul style="list-style-type: none"> Current conservation practice within area of specialism The wider contexts in which conservation is carried out, the implications of context for practice, and the implications of treatments and methods within the context Legislation related to area of practice. E.g. CITES, Human Tissues Act, Ancient Monuments and archaeological areas act.
Conservation Measures	<ul style="list-style-type: none"> Implement agreed conservation measures. e.g. carry out practical treatments to objects of preventive conservation measures with a high level of skill, judgement and ethical consideration. 	<ul style="list-style-type: none"> Detailed aspects of conservation techniques within their area of practice. Materials commonly used in their area of practice.

	<ul style="list-style-type: none"> Monitor and evaluate the effect of conservation measures. e.g. use environmental monitoring equipment to assess a preservation environment in a display case. 	<ul style="list-style-type: none"> Techniques commonly used in their area of practice. Related conservation practices, i.e. the implications of remedial work for preventive practice.
Organisation & Management	<ul style="list-style-type: none"> Prepare detailed reports following established guidelines and practices e.g. writing assessment reports, presenting options and documenting conservation measures applied. Communicate recommendations and advice effectively Ensure a safe working environment within the studio or onsite for themselves as well as for other staff and members of the public. Identify the resources and materials required to support a project. Supervise junior staff, students and volunteers. Supervise other conservation professionals e.g. freelance conservators Manage procurement processes. 	<ul style="list-style-type: none"> Relevant health & safety legislation including Control of Substances Hazardous to Health (COSHH) and manual handling regulations. The process of procuring conservation services. Project management processes e.g. working towards and exhibition deadline.
Personal Professional Development	<ul style="list-style-type: none"> Reflect on and learn from current practice Keep up to date with current thinking, skills and techniques in their area of practice. Promote conservation and the care of cultural heritage to lay and expert audiences, including other professionals involved in cultural heritage or the built environment. 	<ul style="list-style-type: none"> The use of new techniques applicable to their area of practice The limits of their own understanding and abilities and will practise within them.
Judgement and Ethics	<ul style="list-style-type: none"> Effectively implement ethical principles and guidelines related to areas of practice Handle value conflicts and dilemmas e.g. those relating to religious objects Identify where additional legal advice and support is required Identify the limits of own understanding, and when to work with other practitioners. 	<ul style="list-style-type: none"> Ethical principles and codes of practice relating to area of work. Relevant legal requirements, e.g. where objects may be made of materials such as ivory. The wider contexts in which conservation is carried out and the implications of treatments and methods within the context. e.g. when a conservation treatment might impact the reliability of later scientific analysis (wet treatments of paper might alter ink making later identification of authorship impossible).

Other Heritage Sector Apprenticeships

More than 540 apprenticeships Standards are either approved or in development. Below we have outlined the standards which are relevant to the heritage sector.

The following standards are being developed by the Historic England led 'Historic Environment' group.

Cultural Heritage Conservation Technician	Level 4	End Point Assessment Plan
Conservator	Level 7	Standard
Archaeological Technician	Level 3	EPA
Archaeological Specialist	Level 7	Proposal

Assistant Historic Environment Advisor	Level 4	Proposal
Historic Environment Advisor	Level 7	Proposal

Other relevant standards which are either proposed or in development include:

Museums & Galleries Technician	Level 3	EPA
Registrar	Level 5	Proposal
Curator	Level TBC	TBC
Stonemason	Level 3	Standard
Leather Craftsperson	Level 3	Standard
Photographer	Level 2	Standard
Heritage Carpenter and Joiner	Level TBC	Standard
Heritage Engineering Technician	Level 3	Standard
Bookbinder	Level TBC	Standard
Journeyman Bookbinder	Level TBC	Standard
Libraries, Archives & Information Management	Level 3	Proposal

Apprenticeship terminology

Digital Apprenticeship Service: Launched in April 2017, the DAS will be the platform through which employers will access their levy funds, identify training providers and advertise vacancies. At this stage, only levy paying employers will be required to use this.

End Point Assessment: The independent assessment stage at the end of the apprenticeship which must be completed in order to sign off an apprentice as having achieved their apprenticeship.

Framework: The term for the previous package of qualifications which could be followed as part of an apprenticeship. Previously the list of qualifications which could be delivered were set. These are being phased out.

Functional Skills: The term given for English, Maths and sometimes ICT qualifications. As part of apprenticeships that, if candidates don't already hold them, they achieve these qualifications as part of their training.

Institute for Apprenticeships: A new independent statutory body introduced in April 2017, which is responsible for approving new apprenticeship standards.

Levy: Introduced in April 2017, this is the contribution employers with pay bills in excess of £3 million / year will be required to make. Funds will only be able to be used to support apprenticeship delivery.

Regulated Qualification Framework (RQF) Levels: All recognised qualifications are assigned levels which links to the levels of knowledge and skills a candidate who completes the qualification will be able to demonstrate. These skills levels are, entry 1, 2 and 3 then level 1, 2, 3, 4, 5, 6, 7 and 8. For comparison, level 3 equates to 'A-level', level 4 to the first year of an undergraduate programme, 5 to the second year, 6 to the third year. Level 7 and 8 are at a post graduate level.

Standard: The new model for apprenticeships which focus on the outcome and the job role the candidate is expected to perform. Qualifications are included but are only recommended. Employers and training providers can choose which qualifications a candidate takes and how to utilise the apprenticeship funding, provided 20% of their time is spent engaged in off-the-job learning.

Trailblazer: The term for new apprenticeships being developed by employer groups.