

Intent

BTECs are high-quality, career-focused qualifications grounded in the real world of work. BTEC courses focus on skills-based learning and are designed around themed units. This practical approach allows BTEC learners to develop and apply the knowledge and skills that employers, colleges and universities are looking for.

BTEC Construction forms part of a suite of optional subjects that are available at Oswaldtwistle School in KS4 to run alongside the core subjects of Maths, English and Science. The structure of the qualification is flexible enough to accommodate the varying length of time students are on role at Oswaldtwistle School. As it is a short stay school many of the students are only enrolled for short periods of time, although others may be on roll for 2 years or more.

The BTEC Level 1 qualifications in Construction have been developed to give learners the opportunity to:

- engage in learning which is relevant to them and will provide opportunities to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life
- achieve a nationally recognised Level 1 vocationally related qualification
- progress to employment in the construction sector
- progress to related vocational qualifications.

The 7-credit BTEC Level 1 Award is an introduction to the skills, qualities and knowledge that may be required for employment in a particular vocational sector.

The 13-credit BTEC Level 1 Certificate extends the work-related focus from the BTEC Level 1 Award and covers some of the knowledge and practical skills required for a particular vocational sector.

The BTEC Level 1 Certificate offers an engaging programme for those who are clear about the vocational area that they wish to learn more about. These learners may wish to extend their programme through the study of a related GCSE, a complementary NVQ or other related vocational or personal and social development qualification. These learning programmes can be developed to allow learners to study complementary qualifications without duplication of content.

The majority of students will study two Units of work which combined will lead to a Level 1 Award in Construction. Normally the Award will be completed over the course of an academic year, although this may be extended as individual circumstances dictate, or alternatively the Award can be achieved over a shorter period of time. The course is designed to be as flexible as possible in order to meet the varying needs of our students.

There are two main Units that form the core of the Award at Oswaldtwistle School. The Units are Developing Carpentry Skills and Developing Joinery Skills. Other Units of work may be studied if time is available to enable students to achieve the Level 1 Certificate.

Unit 14: Developing Carpentry Skills

This unit is designed to introduce students to the hand tools, materials, personal protective equipment (PPE) and skills used in carpentry. Students will have the opportunity to produce a carpentry item.

Unit introduction emphasis is placed on the correct selection and safe use of the appropriate tools and equipment required to carry out basic carpentry tasks. Students will be given the opportunity to practise the basic techniques used in carpentry, and to use these techniques to construct a carpentry item. Although students will work independently when constructing their carpentry item, they will also function as effective members of a team by contributing to the maintenance of a clean and tidy workshop, and by working responsibly with others. When preparing for work in the construction industry it is important that students are able to seek and respond to guidance from colleagues and tutors during the learning process. This unit will help students to develop an understanding of the personal qualities that are valued by employers.

Unit 15: Developing Joinery Skills

Emphasis is placed on the correct selection and safe use of the appropriate tools, materials and equipment required to carry out basic joinery tasks. Students will be given the opportunity to practise the wood-jointing techniques used to construct basic wood joints, and to use these techniques to construct a simple joinery item in an acceptable time. Although students will work independently when constructing their joinery item, they will also function as effective members of a team by contributing to the maintenance of a clean and tidy workshop, and by working responsibly with others. When preparing for work in the construction industry it is important that students are able to seek and respond to guidance from colleagues and teachers during the learning process. This unit will help students to develop an understanding of the personal qualities that are valued by employers.

The programme of study is designed to be vocational, with strong links to the world of work, but also to other subjects within school. The subject is mapped to link with Functional skills at entry and level one English speaking and listening, reading and writing. In Maths it links to interpreting, representing and analysing. In ICT it links to using IT systems, finding, selecting information, presenting and communicating information.

The programme of study builds on skills from the KS3 National Curriculum:

- Select from and use specialist tools, techniques, processes, equipment and machinery precisely.
- Select from and use a wider, more complex range of materials, components taking into account their properties
- Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions

The KS3 Skills build on the KS1 & 2 National Curriculum skills:

- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities.
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Each Unit has a bank of between 10 and 12 key words which are taught and retrieved on a regular basis, in line with Rosenshines' principles. Also part of the wider curriculum is the personal development of our young people and as such cross curricular themes such as SMSC, British values and careers form an important component of the curriculum intent. Cultural enrichment opportunities beyond the taught curriculum are also viewed with importance and where possible visits to local employers are included in the course, such as builder's merchants and a wood machining factory. Beyond the Curriculum posters are also created and these direct students to films, books, places and jobs that link to the topic being studied.

Historically, almost all vocational education took place in the classroom or on the job site, with students learning trade skills and trade theory from accredited instructors or established professionals. However, in recent years, online vocational education has grown in popularity, making learning various trade skills and soft skills from established professionals easier than ever for students, even those who may live far away from a traditional vocational school.

The World Bank's 2019 World Development Report on the future of work (<http://documents.worldbank.org/curated/en/816281518818814423/pdf/2019-WDR-Report.pdf>) suggests that flexibility between general and vocational education particularly in higher education is imperative to enable workers to compete in changing labour markets where technology plays an increasingly important role.

Successive recent British Governments have made attempts to promote and expand vocational education. In the 1970s, the Business And Technology Education Council was founded to confer further and higher education awards, particularly to further education colleges in the United Kingdom. In the 1980s and 1990s, the Conservative Government promoted the Youth Training Scheme, National Vocational Qualifications and General National Vocational Qualifications. However, youth training was marginalised as the proportion of young people staying on in full-time education increased (Wolf, A. (2002) *Does Education Matter? Myths about Education and Economic Growth* London: Penguin).

Implementation

Both units will give students their first experience of the practical skills associated with the production of a basic carpentry item and a basic joinery item, together with any job knowledge required to underpin such practical skills. Students will be given opportunities to develop their knowledge and practical skills through supervised workshop activities, group teaching and demonstrations of the theories, equipment and techniques involved. Students will need to practise planing a piece of sawn timber, cutting and fixing a steel hinge, and also cutting beading or moulding using a mitre box. Teachers will demonstrate these skills and techniques. Students will use the skills and techniques to produce the assessment work project. The most important requirement of the unit is that students are given opportunities to practise carpentry techniques and procedures. To do this they must be able to recognise and select the tools, materials and PPE needed to work safely. Teachers will demonstrate correct selection and use of the appropriate hand tools, materials and PPE and will also demonstrate the practical carpentry skills required and monitor students' performance as they practise their skills. Teachers will correct poor practice and commend good practice. Teachers will encourage students to ask for help and advice when necessary and to maintain a clean and tidy workplace. They will encourage the reliable, positive and enthusiastic response to learning that employers' value in prospective employees. Students

and teachers are encouraged to view the unit as a 'taster', in that it gives the student an opportunity to experience the type of work involved in carpentry.

Where opportunities arise, teachers will broaden the curriculum to include further related knowledge and understanding, together with exploring cross-curriculum links with other subject areas.

Lessons are sequenced as laid out in the long term but, as explained above, the structure of the qualification is flexible enough to accommodate the varying length of time students are on role at Oswaldtwistle School. As it is a short stay school many of the students are only enrolled for short periods of time, although others may be on roll for 2 years or more.

Practice in the classroom reflects Rosenshine's 10 principles of instruction ([Principles of instruction; Educational practices series; Vol.:21; 2010 \(unesco.org\)](#)) which underpin the implementation of the curriculum. These principles focus on the sequencing and modelling of concepts, the reviewing of taught material, questioning, and the stages of practice, from guided to independent. These principles are linked to the field of cognitive science and in particular the Cognitive Load theory by Sweller (1988).

Assessment

The evidence can be provided by a single practical assignment covering all of the assessment criteria (End points) for the unit. Achievement of assessment criteria should be evidenced through vocationally related practical experiences with tasks specifically designed with the assessment criteria in mind. Many of the assessment criteria will need to be assessed directly by the teacher during practical activities. Where this approach is used, suitable evidence from guided activities would require observation records and/or witness statements plus photographs of the completed work.

Students are assessed formatively against the success criteria on their academic tracker and in a summative manner with the use of baseline and impact assessments. Academic trackers are used to assess the degree of mastery gained by each individual student in relation to the end points on their academic tracker. Progress is recorded by entering a red (novice) or green (secure) against each end point on their tracker. The trackers are constantly monitored over time and end points are revisited through retrieval and interleaving exercises until a student secures their targeted end points.

Impact

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The impact of the course is assessed formatively against the success criteria on student's academic tracker and in a summative manner with the use of baseline and impact assessments. Assessment is binary, in that a student has either met the end point success criteria, or has not met the criteria at the time of assessment. If end point success criteria are "not met", further opportunities and teaching is given for students to demonstrate their ability to meet the criteria.

Students will receive Careers advice and guidance from an independent level 6 qualified careers practitioner with a view to helping them make the transition to either an appropriate work placement, college course or apprenticeship. Where possible encounters with colleges and employers, and places of work will be facilitated, together with an appropriate period of work experience.