

SPORT/SPORT AND EXERCISE SCIENCES

LEVEL 3
BTEC National

This teaching support guide will help you get started with your BTEC delivery. It includes:

- An overview on planning course delivery: Should I teach unit-by-unit? What resources will I need? How should I induct my learners?
- A comparison chart to show how the specification has changed, unit by unit
- Ideas for tracking learner progress
- A sample scheme of work
- Case studies from schools and colleges delivering BTEC
- Hints and tips on good practice
- A walk through the assessment process, including a sample assignment with learner work and grading
- Frequently asked questions

Teaching BTEC will give you the confidence to guide your learners through their BTEC course and achieve their highest grades.

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LEVEL 3
BTEC National

Teaching BTEC

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Contents

Introduction	3
What's new for BTEC	4
What's new for BTEC Level 3 Nationals in Sport.....	6
What's new for BTEC Level 3 Nationals in Sport and Exercise Sciences.....	10
BTEC success stories	14
Getting started: planning course delivery	16
Planning unit delivery	22
BTEC units: a quick overview	26
Developing a scheme of work	28
Assessment and grading	36
Assignment design.....	38
Internal verification of assignment briefs	42
Grading an assignment	44
Internal verification of assessor's comments	45
Frequently asked questions	46
Appendix: A sample assignment	48
Sample assignment front sheet.....	49
Sample assignment brief	50
Sample internal verification of assignment brief	52
Sample learner work	53
Sample assessor's comments.....	65
Sample internal verification of assessment decisions.....	66

Introduction

This publication supports your delivery of BTEC Level 3 Nationals in Sport/Sport and Exercise Sciences qualifications and should be read in conjunction with the published specifications. It provides an overview of how the qualifications have changed, how the BTEC unit specifications should be used, and how best to deliver the course and assess your learners' progress.

These materials are not prescriptive. You may feel that the course can be delivered and assessed more effectively in a different way. This may be because of the way the qualification is organised within your centre or because a different approach better suits your learners, after taking into consideration their learning styles and prior learning. BTEC qualifications are designed to enable you to plan and deliver programmes that are dynamic and relevant to local needs.

Further information and support

For a complete guide to all support offered by Edexcel at every stage of your BTEC delivery, please refer to *BTEC Support*. This booklet is available in your Specification Pack.

What's new for BTEC

Edexcel has redeveloped its suite of BTEC Level 2 First and BTEC Level 3 National qualifications to ensure that they are aligned with the new Qualifications and Credit Framework (QCF). Wherever possible the changes have been minimal and in all cases BTEC units have retained their key characteristics.

What is the Qualifications and Credit Framework?

The Qualifications and Credit Framework (QCF) is a system whereby credit is awarded for qualifications and units (small steps of learning). It enables learners to work towards qualifications at their own pace and along flexible routes.

All QCF units are published on the Register of Regulated Qualifications (RRQ). Every unit and qualification has a credit value showing how much time it takes to complete and a level showing how difficult it is (ranging from Entry Level to Level 8). Learners are given a unique learner number (ULN) where their individual record of credit accumulation is logged. For more information see www.accreditedqualifications.org.uk

How does this affect the BTEC Level 3 National qualifications?

The new family of BTEC Nationals – which are all at Level 3 – is made up of four sizes of qualification: Certificates, Subsidiary Diplomas, Diplomas and Extended Diplomas. (Qualification names have changed during the revision of BTEC Nationals to meet the QCF structure – please see the table below to compare the new names to the old if you have taught BTEC before.)

The Certificate has been introduced as a new BTEC Level 3 National qualification, to be broadly equivalent to one AS Level. This increases flexibility and improves opportunities for co-teaching with A Levels and other qualification types. The BTEC Level 3 Certificate will be nested wherever possible in the corresponding BTEC Level 3 Subsidiary Diploma, and the BTEC Level 3 Diploma in the corresponding BTEC Level 3 Extended Diploma.

	BTEC Level 3 National Qualifications			
	Certificate	Subsidiary Diploma	Diploma	Extended Diploma
Previous name	this is new	Award	Certificate	Diploma
Credits (minimum)	30	60	120	180
Guided learning hours (GLH)	180	360	720	1080
Broad equivalence	1 AS-Level	1 A-Level	2 A-Levels	3 A-Levels

All BTEC Level 3 National qualifications (whether Certificates, Subsidiary Diplomas, Diplomas or Extended Diplomas) comprise a mix of units and these can be at different levels but the majority of units must be at the main level of the qualification: Level 3.

Rules of unit combination have been determined to show how learners can select and combine unit choices to achieve new BTEC Level 3 National qualifications (please see the specification for the list of available units). In some cases, there will be mandatory units which all learners must take to achieve their qualification.

The overall grade for any BTEC qualification will be based on a table in the specification that converts pass, merit or distinction unit grades to points and then totals those points.

For full information about these qualification types, rules of unit combination and grading, please see the specification.

New features for BTEC units

There are some new features common to all new BTEC units:

- credit level and guided learning hours (GLH)[†] are stated
- expanded guidance is given on delivery and assessment
- BTEC units now contain guidance and mapping to functional skills and personal, learning and thinking skills (PLTS) – so you can embed learning for these skills
- outline learning plans give suggestions for unit delivery and assessment
- a suggested programme of assignments gives ideas for assignments that will cover the unit's grading criteria

[†]Guided learning hours (GLH):

all the times when a member of staff (for example, tutor, trainer or facilitator) is present to give guidance ('contact time'). This includes lessons, lectures, tutorials and supervised study in, for example, learning resource centres and workshops. It also includes time spent with learners observing and assessing their work towards assignments.

Every BTEC unit contains an Assessment and Grading Criteria grid. For the purpose of brevity, this will be referred to as the 'grading grid' / 'grading criteria' throughout this booklet. (In official terms assessment criteria are pass criteria; grading criteria are merit and distinction criteria.)

• each unit suggests how you can link with employers. This additional information is not meant to be prescriptive. A key feature of BTEC is that you can match your delivery of the qualifications to local needs and circumstances, and to the opportunities that present in your area to give a real vocational focus. For more information about BTEC units see page 26.

Functional skills

Functional skills have replaced key skills. These are a set of standards that establish a benchmark in English, mathematics and ICT. Functional skills are available from Entry Level to Level 2.

BTEC specifications now offer guidance on how these functional skills can be embedded in your delivery of each unit. Please note: functional skills can be tested while delivering a BTEC course but they are not an integral part of the qualification. They are designed to be assessed by externally set and marked tests.

Personal, learning and thinking skills (PLTS)

BTEC Level 3 National units offer guidance and signposting to help you develop learners' personal, learning and thinking skills. Along with functional skills, these are seen as key elements for success in learning, life and work. Please note that PLTS are not a compulsory or integral component of the BTEC Level 3 National, but should you wish to integrate your PLTS delivery with this qualification, we provide this guidance for you to do so.

The PLTS framework consists of six groups of skills:

- independent enquiry (IE)
- creative thinking (CT)
- reflective learning (RL)
- team working (TW)
- self-management (SM)
- effective participation (EP).

These have connected outcome statements (to view these visit www.qcda.org.uk)

Although each skill set is distinctive, they may be interconnected and any assignment or learning experience may explore one or more PLTS. BTEC Level 3 National qualifications offer the opportunity to cover PLTS, but in order for learners to recognise this coverage the PLTS would need to be made explicit at delivery. An effective way to record competence in PLTS is by using a tracking system that is linked to the PLTS references in the unit specifications.

WorkSkills

Edexcel has developed a range of WorkSkills qualifications at Entry 3, Level 1 and Level 2 that may also be studied alongside BTEC Level 3 Nationals. WorkSkills comprise a range of units that focus on personal development, work, social and domestic skills.

For more information on WorkSkills see www.edexcel.com/workskills

So, why choose BTEC

BTECs are an established and highly successful alternative to general qualifications, suitable for a wide range of learners. As work-related qualifications, they are designed to accommodate the needs of employers as well as allowing progression to university.

BTECs provide a more practical, real-world approach to learning alongside a theoretical background, giving learners the knowledge, understanding and skills that they need to prepare for employment. BTECs also provide career development opportunities for those already in work. They can be taken as well as, or instead of, GCSEs and A levels in schools and colleges.

Comprising individual units, which can be built to form a qualification at a size that is suited to the learner, BTECs can be delivered as a full-time or part-time course. Each unit is assessed through the completion of assignments that are designed by you as tutor and call on a range of evidence types. Such flexibility enables you to deliver a qualification that is just right for your learners and your centre.

What's new for BTEC Level 3 Nationals in Sport

Units have been revised and updated so that they can be mapped to the Qualifications and Credit Framework. This table summarises the specification changes unit by unit. For a complete list of new units, including rules of combination and mandatory/optional unit status, please see the specification.

Key

P – Partial mapping (some topics from the old unit appear in the new unit)

F – Full mapping (topics in old unit match new unit exactly or almost exactly)

NA – Not applicable; does not map to any unit in the old specification

New units		Old units		Mapping/comments
Number	Name	Number	Name	
Unit 1	Principles of Anatomy and Physiology in Sport	Unit 1	The Body in Action	P: The new unit contains theoretical topics from the old unit (LO1 to LO5), but response to exercise now incorporated into new Unit 2.
Unit 2	The Physiology of Fitness	Unit 1	The Body in Action	P: The new unit contains practical topics relating to LO1 – LO5 of the old unit (response to exercise); <i>LO1 – Know the body's response to acute exercise. LO2 – Know the long-term effects of exercise on the body systems. LO3 – Be able to investigate the physiological effects of exercise on the body systems</i>
Unit 3	Assessing Risk in Sport	Unit 2	Health and Safety in Sport	F: The new unit contains all or almost all of the topics from the old unit
Unit 4	Fitness Training and Programming	Unit 3	Training and Fitness for Sport	P: The new unit contains topics relating to learning outcomes 2, 3 and 4 of the old unit. The new unit contains a new topic: <i>LO2 – Be able to plan a fitness training session</i>
Unit 5	Sports Coaching	Unit 4	Sports Coaching	F: The new unit contains all or almost all of the topics from the old unit
Unit 6	Sports Development	Unit 5	Sports Development	F: The new unit contains all or almost all of the topics from the old unit
Unit 7	Fitness Testing for Sport and Exercise	Unit 6	Fitness Testing for Sport and Exercise	F: The new unit contains all or almost all of the topics from the old unit
Unit 8	Practical Team Sports	Unit 7	Practical Team Sports	F: The new unit contains all or almost all of the topics from the old unit
Unit 9	Practical Individual Sports	Unit 8	Practical Individual Sports	F: The new unit contains all or almost all of the topics from the old unit
Unit 10	Outdoor and Adventurous Activities	Unit 9	Outdoor and Adventurous Activities	F: The new unit contains all or almost all of the topics from the old unit
Unit 11	Sports Nutrition	Unit 10	Sports Nutrition	F: The new unit contains all or almost all of the topics from the old unit
Unit 12	Current Issues in Sport	Unit 11	Sport and Society	P: The new unit contains topics relating to learning outcomes 1, 3 and 4 of the old unit. The new unit contains a new topic: <i>LO2 – Know how media and technology influence modern sport</i>
Unit 13	Leadership in Sport	Unit 12	Leadership in Sport	F: The new unit contains all or almost all of the topics from the old unit
Unit 14	Exercise, Health and Lifestyle	Unit 13	Exercise, Health and Lifestyle	F: The new unit contains all or almost all of the topics from the old unit
Unit 15	Instructing Physical Activity and Exercise	Unit 14	Instructing Physical Activity and Exercise	F: The new unit contains all or almost all of the topics from the old unit
Unit 16	Exercise for Specific Groups	Unit 15	Exercise for Specific Groups	F: The new unit contains all or almost all of the topics from the old unit
Unit 17	Psychology for Sports Performance	Unit 16	Psychology for Sports Performance	F: The new unit contains all or almost all of the topics from the old unit
Unit 18	Sports Injuries	Unit 17	Sports Injuries	F: The new unit contains all or almost all of the topics from the old unit
Unit 19	Analysis of Sports Performance	Unit 18	Analysis of Sports Performance	F: The new unit contains all or almost all of the topics from the old unit
Unit 20	Talent Identification and Development in Sport	Unit 19	Talent Identification and Development in Sport	F: The new unit contains all or almost all of the topics from the old unit
Unit 21	Sport and Exercise Massage	Unit 20	Sport and Exercise Massage	F: The new unit contains all or almost all of the topics from the old unit
Unit 22	Rules, Regulations and Officiating in Sport	Unit 21	Rules, Regulations and Officiating in Sport	F: The new unit contains all or almost all of the topics from the old unit
Unit 23	Organising Sports Events	Unit 22	Organising Sports Events	F: The new unit contains all or almost all of the topics from the old unit
Unit 24	Physical Education and the Care of Children and Young People	Unit 23	Working with Children in Sport	P: The new unit contains topics relating to learning outcomes 3 and 4 of the old unit. The new unit contains new topics: <i>LO1 – Know the structure of physical education within the curriculum. LO2 – Understand the importance of physical education in society. LO3 – Be able to structure a lesson of physical education. LO4 – Know the responsibilities of those who work with children to safeguard and promote their welfare, and strategies for safeguarding children, young people and self</i>

New units		Old units			Mapping/comments
Number	Name	Number	Name		
Unit 25	Sport as a Business	Unit 24	Sport as a Business		F: The new unit contains all or almost all of the topics from the old unit
Unit 26	Work Experience in Sport	Unit 25	Work-based Experience in Sport		F: The new unit contains all or almost all of the topics from the old unit
Unit 27	Technical and Tactical Skills in Sport	Unit 26	Technical and Tactical Skills in Sport		F: The new unit contains all or almost all of the topics from the old unit
Unit 28	The Athlete's Lifestyle	Unit 27	The Athlete's Lifestyle		F: The new unit contains all or almost all of the topics from the old unit
Unit 29	Principles and Practices in Outdoor Adventure	Unit 28	Principles and Practices in Outdoor Adventure		F: The new unit contains all or almost all of the topics from the old unit
Unit 30	Equipment and Facilities for Outdoor and Adventurous Activities	Unit 29	Equipment and Facilities for Outdoor and Adventurous Activities		F: The new unit contains all or almost all of the topics from the old unit
Unit 31	Impact and Sustainability in Outdoor Adventure	Unit 30	Impact and Sustainability in Outdoor Adventure		F: The new unit contains all or almost all of the topics from the old unit
Unit 32	Environmental Education for Outdoor Adventure	Unit 31	Environmental Education for Outdoor Adventure		F: The new unit contains all or almost all of the topics from the old unit
Unit 33	Skills for Land-based Outdoor and Adventurous Activities	Unit 32	Skills for Land-based Outdoor and Adventurous Activities		F: The new unit contains all or almost all of the topics from the old unit
Unit 34	Skills for Water-based Outdoor and Adventurous Activities	Unit 33	Skills for Water-based Outdoor and Adventurous Activities		F: The new unit contains all or almost all of the topics from the old unit
Unit 35	Leading Land-based Outdoor and Adventurous Activities	Unit 34	Leading Land-based Outdoor and Adventurous Activities		F: The new unit contains all or almost all of the topics from the old unit
Unit 36	Leading Water-based Outdoor and Adventurous Activities	Unit 35	Leading Water-based Outdoor and Adventurous Activities		F: The new unit contains all or almost all of the topics from the old unit
Unit 37	Outdoor and Adventurous Expeditions	Unit 36	Outdoor and Adventurous Expeditions		F: The new unit contains all or almost all of the topics from the old unit
Unit 38	Alternative Pursuits for Outdoor Adventure	Unit 37	Alternative Pursuits for Outdoor Adventure		F: The new unit contains all or almost all of the topics from the old unit
Unit 39	Sports Facilities and Operational Management	New	–		NA: This is a new unit. LO1 – Know the aims, objectives and resources of selected sports and leisure facilities. LO2 – Know the services and products offered by selected sports and leisure facilities. LO3 – Understand the skills required for working in sports and leisure facilities. LO4 – Be able to demonstrate effective operational skills
Unit 40	Sports Legacy Development	New	–		NA: This is a new unit. LO1 – Know the key principles of sports legacy development. LO2 – Understand the planning process involved in sports development programmes. LO3 – Be able to plan and review a local sports legacy project. LO4 – Know the potential impact of hosting global events
Unit 41	Profiling Sports Performance	New	–		NA: This is a new Level 4 unit. LO1 – Understand the role and function of performance profiling in sport. LO2 – Be able to determine the current sports performance of an individual. LO3 – Be able to set targets for future sports performance of an individual. LO4 – Be able to review the sports performance action plan
Unit 42	Research Investigation in Sport and Exercise Sciences	New	–		NA: This is a new Level 4 unit. LO1 – Be able to design a research investigation. LO2 – Be able to implement the investigation and interpret results. LO3 – Be able to review the results of the research investigation. LO4 – Be able to present the research investigation
Unit 43	Laboratory and Experimental Methods in Sport and Exercise Sciences	New	–		NA: This is a new Level 4 unit. LO1 – Understand health, safety and ethical issues associated with laboratory and experimental methods in sport and exercise sciences. LO2 – Be able to estimate percent body fat using anthropometric methods. LO3 – Be able to measure and interpret the anthropometric somatotype. LO4 – Be able to use experimental methods to predict maximum oxygen uptake
Unit 44	Applied Sport and Exercise Physiology	New	–		NA: Unit 21 from Nationals in Sport and Exercise Sciences now included in structure for Nationals in Sport. LO1 – Know how temperature and altitude affect exercise and sports performance. LO2 – Know about the physical differences between people of different gender and race and their effect on exercise and sports performance. LO3 – Know the impact that the physiological effects of ageing have on exercise and sports performance. LO4 – Know the effects and implications of using ergogenic aids for exercise and sports performance.

What's new for BTEC Level 3 Nationals in Sport and Exercise Sciences

Units have been revised and updated so that they can be mapped to the Qualifications and Credit Framework. This table summarises the specification changes unit by unit. For a complete list of new units, including rules of combination and mandatory/optional unit status, please see the specification.

Key

P – Partial mapping (some topics from the old unit appear in the new unit)

F – Full mapping (topics in old unit match new unit exactly or almost exactly)

NA – Not applicable; does not map to any unit in the old specification

New units		Old units		Mapping/comments
Number	Name	Number	Name	
Unit 1	Anatomy for Sport and Exercise	Unit 1	Anatomy for Sport and Exercise	F: The new unit contains all or almost all of the topics from the old unit
Unit 2	Sport and Exercise Physiology	Unit 2	Sport and Exercise Physiology	F: The new unit contains all or almost all of the topics from the old unit
Unit 3	Sport and Exercise Psychology	Unit 3	Sport and Exercise Psychology	F: The new unit contains all or almost all of the topics from the old unit
Unit 4	Research Methods for Sport and Exercise Sciences	Unit 4	Research Methods for Sport and Exercise Sciences	F: The new unit contains all or almost all of the topics from the old unit
Unit 5	Research Project in Sport and Exercise Sciences	Unit 5	Research Project in Sport and Exercise Sciences	F: The new unit contains all or almost all of the topics from the old unit
Unit 6	Sports Biomechanics in Action	Unit 6	Sports Biomechanics in Action	F: The new unit contains all or almost all of the topics from the old unit
Unit 7	Exercise, Health and Lifestyle	Unit 7	Exercise, Health and Lifestyle	F: The new unit contains all or almost all of the topics from the old unit
Unit 8	Fitness Testing for Sport and Exercise	Unit 8	Fitness Testing for Sport and Exercise	F: The new unit contains all or almost all of the topics from the old unit
Unit 9	Fitness Training and Programming	Unit 9	Training and Fitness for Sport	P: The new unit contains topics relating to learning outcomes 2, 3 and 4 of the old unit. <i>The new unit contains a new topic: LO2 – Be able to plan a fitness training session.</i>
Unit 10	Sport and Exercise Massage	Unit 10	Sport and Exercise Massage	F: The new unit contains all or almost all of the topics from the old unit
Unit 11	Analysis of Sports Performance	Unit 11	Analysis of Sports Performance	F: The new unit contains all or almost all of the topics from the old unit
Unit 12	Sports Nutrition	Unit 12	Sports Nutrition	F: The new unit contains all or almost all of the topics from the old unit
Unit 13	Current Issues in Sport	Unit 13	Sport and Society	P: The new unit contains topics relating to learning outcomes 1, 3 and 4 of the old unit. <i>The new unit contains a new topic: LO2 – Know how media and technology influence modern sport</i>
Unit 14	Instructing Physical Activity and Exercise	Unit 14	Instructing Physical Activity and Exercise	F: The new unit contains all or almost all of the topics from the old unit
Unit 15	Sports Injuries	Unit 15	Sports Injuries	F: The new unit contains all or almost all of the topics from the old unit
Unit 16	Sports Coaching	Unit 16	Sports Coaching	F: The new unit contains all or almost all of the topics from the old unit
Unit 17	Practical Individual Sports	Unit 17	Practical Individual Sports	F: The new unit contains all or almost all of the topics from the old unit
Unit 18	Practical Team Sports	Unit 18	Practical Team Sports	F: The new unit contains all or almost all of the topics from the old unit
Unit 19	Outdoor and Adventurous Activities	Unit 19	Outdoor and Adventurous Activities	F: The new unit contains all or almost all of the topics from the old unit
Unit 20	Applied Sport and Exercise Psychology	Unit 20	Applied Sport and Exercise Psychology	F: The new unit contains all or almost all of the topics from the old unit
Unit 21	Applied Sport and Exercise Physiology	Unit 21	Applied Sport and Exercise Physiology	F: The new unit contains all or almost all of the topics from the old unit
Unit 22	Exercise for Specific Groups	Unit 22	Exercise for Specific Groups	F: The new unit contains all or almost all of the topics from the old unit
Unit 23	Work Experience in Sport	Unit 23	Work-based Experience in Sport	F: The new unit contains all or almost all of the topics from the old unit

New units		Old units		Mapping/comments
Number	Name	Number	Name	
Unit 24	Sports Facilities and Operational Management	NEW	-	<p>NA: This is a new unit.</p> <p><i>LO1 – Know the aims, objectives and resources of selected sports and leisure facilities.</i></p> <p><i>LO2 – Know the services and products offered by selected sports and leisure facilities.</i></p> <p><i>LO3 – Understand the skills required for working in sports and leisure facilities.</i></p> <p><i>LO4 – Be able to demonstrate effective operational skills</i></p>
Unit 25	Research Investigation in Sport and Exercise Sciences	NEW	-	<p>NA: This is a new Level 4 unit.</p> <p><i>LO1 – Be able to design a research investigation.</i></p> <p><i>LO2 – Be able to implement the investigation and interpret results.</i></p> <p><i>LO3 – Be able to review the results of the research investigation.</i></p> <p><i>LO4 – Be able to present the research investigation</i></p>
Unit 26	Laboratory and Experimental Methods in Sport and Exercise Sciences	NEW	-	<p>NA: This is a new Level 4 unit.</p> <p><i>LO1 – Understand health, safety and ethical issues associated with laboratory and experimental methods in sport and exercise sciences.</i></p> <p><i>LO2 – Be able to estimate percent body fat using anthropometric methods.</i></p> <p><i>LO3 – Be able to measure and interpret the anthropometric somatotype.</i></p> <p><i>LO4 – Be able to use experimental methods to predict maximum oxygen uptake</i></p>
Unit 27	Profiling Sports Performance	NEW	-	<p>NA: This is a new Level 4 unit.</p> <p><i>LO1 – Understand the role and function of performance profiling in sport.</i></p> <p><i>LO2 – Be able to determine the current sports performance of an individual.</i></p> <p><i>LO3 – Be able to set targets for future sports performance of an individual.</i></p> <p><i>LO4 – Be able to review the sports performance action plan</i></p>

BTEC success stories

Secondary School Staffordshire (11–19 years)

Why did you choose to run the BTEC National in Sport Course?

We have had such great success with our BTEC First in Sport courses that we were keen to offer more BTEC courses: BTEC Nationals in Sport was the next logical step. From our BTEC First in Sport, not only have our learners attained really good grades, but the rest of our PE department staff and I have really enjoyed the variety of units and the assessment freedom that we are given within BTEC.

What have you enjoyed most about the course as a tutor?

I have really enjoyed the fact that I can concentrate on teaching a subject area that I enjoy. The variety of units allows us as a department to tap into all our different areas of expertise. Although we all studied a Sports-related degree, some of us prefer the exercise physiology side of it whereas others prefer the sports psychology. With the BTEC National in Sport we can teach to our strengths and areas of interest.

How has your teaching changed since you started to deliver it?

I have developed a variety of teaching styles, in line with the BTEC ethos. Before BTEC I really didn't teach via learner-centred learning – it was all teaching towards the exam with lots of mock papers and revision teaching. This gave learners basic 'surface learning': they could recite information back verbatim but did not always understand the concepts and application. Now I can give learners a topic to research and they deliver some very interesting information both to me and to the rest of the class.

What changes have you observed in learners as they have progressed through the course?

Learners have really increased their research skills. I can give them a topic to study and they can now find and use a wide range of materials including journals, which many GCE learners do not get to grips with until they are at university. I have also found that their presentation skills improve as they do get quite a lot of practice in presenting their work to me – and on occasion, the rest of the class. Again, this is a useful skill for the future as it can be used in interviews, jobs in the sports industry or higher education.

Can you give any examples of how your learners have progressed since embarking on a BTEC course?

Again, the BTEC National in Sport has given learners the ability and opportunity to continue their studies. Many of the BTEC learners have proved that they have the ability and skills required to do well at this level in a coursework-based qualification.

Any tips for tutors delivering the BTEC National in Sport?

I would encourage all tutors to make lessons as practical and 'hands on' as possible. Try to generate data in practical lessons that can be used in theory lessons – this will really help to engage the learners and allow them to apply their knowledge.



Further Education College Essex (16–19 years)

Why did you choose to run the BTEC National in Sport and Exercise Sciences course?

We've been running BTEC Sports courses for the last 15 years and the qualification started out as an applied science course called Sport Sciences. It has changed over the years and I prefer the content and structure of the current qualification. We have always had a large intake for this course and it continues to do very well.

What have you enjoyed most about the course as a tutor?

I initially considered teaching in higher education; however, I decided to stay in further education because I really enjoy the scientific side of this course. The BTEC National in Sport and Exercise Sciences is very enjoyable and interesting to teach. As we have continuing success with this course, we have also had the finances to install a sport and exercise sciences laboratory – which has really helped to bring the qualification to life and allowed learners to experience fitness tests which they haven't experienced before, for example, measurement of maximum oxygen uptake.

How has your teaching changed since you started to deliver it?

Having gone straight from my PGCE qualification to teaching BTEC Sport I didn't really know a great deal about BTEC. I was initially using lots of overheads and lecturing the learners, which must have made for quite boring lessons. I have since applied as much practical activity to my lessons as possible. For example, rather than just teaching about the heart, I now show the learners a heart dissection and get them to have a go at discovering the structure of a heart through the dissection process. Some learners are squeamish at the start of this type of lesson, but towards the end they invariably get involved and feel the heart for themselves. We are lucky to have a sport and exercise sciences laboratory, however, it is possible to perform basic fitness tests (for example, the handgrip dynamometer test or the sit-and-reach test) in the classroom. These tests generate data which we can then study and apply to theory.

What changes have you observed in learners as they have progressed through the course?

Learners have arrived on this course with some interest in sport and exercise sciences, but mainly in the practical side of sport. As we have progressed with the course, the majority become very engaged in sport and exercise sciences and go on to higher education to study the subject further.

Can you give any examples of how your learners have progressed since embarking on a BTEC course?

We have had a great number of learners who have really excelled on this course. Some have arrived with the minimum entry requirements for the course and have then gone on to achieve Distinctions, allowing them to gain sought-after places at university.



Getting started: planning course delivery

Good planning is the first step to successful BTEC delivery and assessment. It is the best way of making sure everything is in place and that your unit coverage is robust and achievable. This guide should help you get started.

First things first

- Understand the structure of a BTEC unit (see page 26).
- Read and understand the specification.
- Decide whether you will teach unit by unit or if it is best to integrate unit delivery (for further guidance on this see page 22).
- Plan your programme of assignments (see page 36).

Key areas to consider

- Resource planning, such as when you might need to call on the expertise of specialist staff.
- Timetabling, practical lessons and enrichment opportunities
- Interim and major assessment points.
- Planning for internal verification.

The BTEC assessment and delivery process



Overview of roles and responsibilities

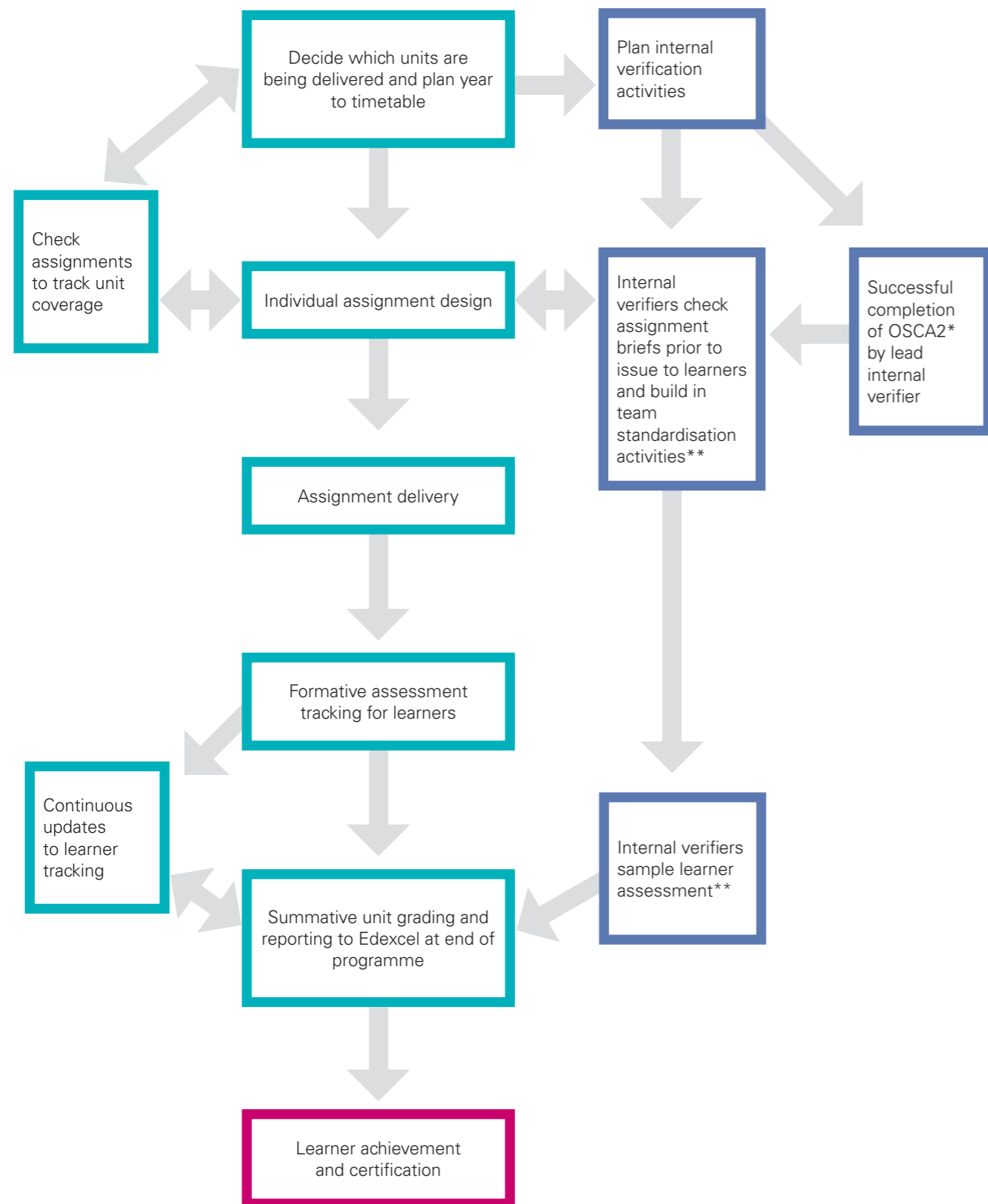
	Tutors/Assessors	Learners	Internal verifiers*	Programme managers/ heads of department
Planning	Read the specification Work with colleagues in their department, planning the course as a team Design assignments which are suited to local and learner needs and matched to unit grading criteria Action the internal verifier's advice on planning	Manage and organise their own time to prepare evidence for assignments	Support programme planning Arrange standardisation meetings across teams and multi-sites Ensure an effective system for recording learner achievement is in place Advise programme team on any training needs	Manage the team to devise assessment programme in collaboration with tutors (assessors) and internal verifier(s) Prepare resources plan to match assignment programme Manage timetable and room allocation Organise a tracking mechanism for learner achievement
Implementing	Deliver unit content and assignments Guide learners towards approaches in gathering assessment evidence Complete observation and witness statements to support demonstration of practical skills Observe, scrutinise and record evidence of individual work within group activities Review progress of learners to give opportunities for achieving grading criteria Award unit grades when the unit has been completed and internally verified	Participate fully in learning Produce work for assessment	Provide advice and support to assessors on regular basis Advise on opportunities for evidence generation and collection Advise on the appropriateness of assessment evidence with regard to level, sufficiency, authenticity, validity and consistency Advise on the interpretation of national standards and undertakes standardisation exercise Keep records of the verification process Liaise with Edexcel Assessment Associate where appropriate	Take part in the programme Monitor delivery Organise regular team meetings Coordinate tutor/assessor activity Liaise with the internal verifier(s) Deal with learner issues Oversee maintenance of learner record
Internal Verifying	Action internal verifier's advice on assignment design Check authenticity and sufficiency of assessment evidence produced against grading criteria/unit content Record assessment decisions and puts these forward for internal verification Action internal verifier's advice on grading decisions	Check the validity and sufficiency of the evidence with the assessor Review opportunities for achieving grading criteria Participate in self- and peer-assessment activities where appropriate	Check if assignments are fit for purpose Use their subject specialism to sample assignments to check the quality of assessment and to ensure that it is consistent, fair and reliable Ensure own assessment decisions are sampled when teaching on the programme	Collaborate with internal verifier(s) to maintain the programme Check the validity of overall verification programme Coordinate awarding body requirements Update internal verifier team on current practice Respond to any awarding body action
Feedback	Give constructive feedback to learners and record learners' formative achievements Provide guidance for learners to enhance achievement Plan next steps with learners Record learners' summative achievements	Receive assessment recommendations and feedback from the assessor Plan next steps with the assessor	Give decisions and feedback on the sampling Ensure appropriate corrective action is taken where necessary Provide feedback on aspects of the assessment system to the programme team, senior management and Edexcel Take part in the formal stages of any appeal	Coordinate and contribute to final internal awarding meetings Oversee recording and transmission of accurate results Review the course for the year with an end of year report including resource and teaching evaluation Plan for the next academic year



*Lead internal verifiers who have passed the new OSCA2 test can seek certification of learner work for the programme(s) they manage without annual external sampling. (Some centres may be randomly sampled.)

*Some of these functions may be undertaken by the lead internal verifier (see page 42)

Overview of year



*OSCA2 is the online standardisation test that would give a lead internal verifier, and consequently the programme(s) they manage, accredited status. With this status a lead internal verifier can seek certification of learners' work during the period of that accreditation without annual external sampling. (Some centres may be randomly sampled.)

**Where the centre has a lead internal verifier who has passed the OSCA2 test, this process is coordinated by them.

Learner induction

It is crucial that you familiarise your learners with how BTEC delivery and assessment work. Consider developing learners' understanding of:

- the specification (structure, content, grading grids, level of programme and equivalency)
- the purpose of the assignment briefs
- the relationship between the tasks given in an assignment and the grading criteria
- the way that the BTEC grading grids work in relation to their prior experience of other assessment models
- internal assessment procedures and centre policies
- the concept of deadlines/hand-in dates
- the concept of vocational and work-related learning
- learner responsibility.

Setting expectations

It is common practice to provide induction books for learners to sign at the beginning of the programme. These could set out your centre's expected rules and recommendations, for example adherence to health and safety legislation, and your centre's plagiarism policy. These could also contain rules and procedures about the facilities learners will use.

You might decide to show your new learners some work from previous years. This will give them a realistic idea of what is required and how assessment is carried out for a unit.

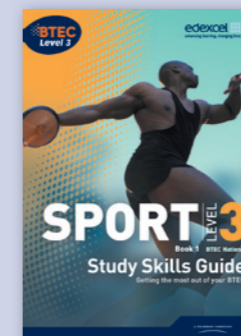
Progression

It is your duty to provide learners with clear guidance on progression and models of continued study that are relevant to their abilities. For more information on how learners might progress from a BTEC Level 3 National, please see www.btec.co.uk

Edexcel's Study Skills Guides

Edexcel publishes free *Study Skills Guides* for BTEC Level 3 National learners. These provide guidance on:

- self-assessment of strengths so learners can identify the best way for them to learn
- time management
- getting the most from work experience and special events
- working with others
- finding and using resources
- organising, interpreting and presenting information
- making presentations
- tackling assignments (including a worked assignment from a learner perspective).



External links

All work-related programmes benefit from external links with the vocational sector. These links could be developed in many ways:

- provision of 'live' case study material that is company or organisation based
- learner visits to vocational settings
- professional input from practitioners, especially where vocational expertise is clearly identified in the delivery section of the units
- work placements that are specifically related to the qualification
- tutor placements to enhance vocational expertise.

Always check the vocational relevance of assignments. This can take two forms: the learner acquiring the vocational language and skills, or setting the assignment within a strong vocational context, for example 'you are working as a leisure centre assistant' or 'you are assisting your rugby club sports coach'. While there is scope for work experience in the sports industry, there are also plenty of opportunities for other practitioners to assist with programme delivery as part-time lecturers, visiting lecturers or by meeting and talking to learners at exhibitions, leisure centres, workshops, sports science laboratories, etc. Such practitioners could be physiotherapists, football managers, dieticians, sport and exercise scientists, etc.

Career opportunities

Learners often have limited understanding of the sectors within the sports industry. For instance, they may believe that there are only jobs for sports therapists, exercise instructors and leisure centre staff, when in fact, there are many opportunities within other areas of the sports industry, such as journalism, marketing and retail.

Work experience

Work experience within sport and sport and exercise sciences is relatively easy to arrange because most centres are close to at least one type of sports provider. Learners can also have the opportunity of shadowing a PE tutor/sports lecturer from their current or past centre. Many learners in college already have a part-time job working as a leisure centre assistant. Where this is the case, the leisure centre is usually very happy to take the learner on for a work experience programme. However, in these circumstances, the learner should also be encouraged to explore other careers in their place of work. For example, if the learner is currently employed as a lifeguard, they could spend time shadowing a gym instructor.

Keeping up to date

Learners should be encouraged to read the sports sections of quality newspapers and relevant trade journals.

Idea

Prior to the work experience, it is a good idea to ensure that all learners send their placement supervisors a letter from your centre. This should outline the purpose of work experience and what both the learner and work experience provider can hope to expect from it. Make contact with your learner early on in the work experience period and if there are any problems make an appointment to speak with the supervisor to share your concerns and expectations.

Forging links with local business

Work experience is an invaluable way of allowing learners to have a taste of their chosen career. In order to give learners as many opportunities in a range of different careers, it is a good idea for you and your centre to forge links with relevant local businesses and organisations in your area. Many centres have professionals from their local area come in to deliver talks on subjects that are related to the BTEC Sport qualifications, for example physiotherapists from local football clubs, leisure centre managers, fitness instructors or stewards.

Good teaching practice and resources**Staffing**

All staff must be appropriately qualified to teach this course. Many tutors delivering BTEC Level 3 Nationals in Sport/Sport and Exercise Sciences are qualified in the subject area and have relevant vocational experience. Tutors should have subject-specific knowledge for the unit(s) that they deliver.

Familiarity with current professional practice

It is important to have knowledge of current professional practice in order to set standards within each specialist area. It is a feature of the design of BTEC qualifications that they have the flexibility to respond to National Occupational Standards in each area as current practice changes. They also offer the opportunity for innovative approaches to teaching and learning.

Additional specialist practitioners

You may employ specialist practitioners, taking care that legal requirements are met (for example in the outdoor and adventurous activities unit, or in sport and exercise massage). Where external tutors are delivering units, the internal verifier should carry out close monitoring to help ensure the quality of the assessment process.

Awareness of learners requiring reasonable adjustment

Be aware of individual requirements and ensure that learners can achieve the unit grading criteria in all of the units that the planned programme contains. You are free to make adjustments to programme delivery to ensure that learners can be guaranteed gaining the qualification

if they comply with all unit grading demands (see more information about reasonable adjustment in the panel opposite).

Learning resources

A range of current resource material to support the programme is essential, for example visits, textbooks, videos, magazines, journals, other publications and access to websites.

Sufficient resources to meet the number of learners

Your centre signs a commitment to ensure adequate provision as part of the approval process. This must be adhered to in all cases so that learners are guaranteed the very best provision a centre can provide. Ongoing Edexcel quality assurance processes will check that the centre has sufficient resources to support the delivery of the programme and that the centre has made provision to meet any specialist resource requirements at the approval stage.

Where resources are shared, carefully assess, plan and determine the access demands of all programmes within your subject area.

A sport base room is desirable

A base room is of great benefit to you and your learners. Here you can provide secure storage facilities for portfolios of work and resources such as textbooks, journals and CD-ROMs. You might display learners' work, such as posters and leaflets that they have designed as part of their assignments. The room could also contain information posters on topics such as basic fitness-testing equipment, anatomy and physiology, helping to bring theory lessons to life. If there is value placed on where learners work, they are more likely to engage with the programme.

Access to specialist facilities

Optional unit choices should be made with care. Check the specification and unit content to ensure that your resources are adequate in terms of physical equipment and appropriate technology. You should also check that you have access to well-trained staff to deliver the specialism at an appropriate and qualified level. Specific resources are indicated in individual units under the Essential Resources section.

Tutorials, individual learning plans and individual study time

The BTEC Level 3 National in Sport/Sport and Exercise Sciences programmes offer learners the perfect opportunity to gain skills in independent learning. Initially learners will probably require some guidance to help them learn how to carry out research. It is a good idea to include learner-initiated private study in your outline learning plan to help learners to develop independent learning skills, both for assignment work and for research within lessons.

What is a reasonable adjustment?

Reasonable adjustments are arrangements which give a learner access to a qualification. Reasonable adjustments must be agreed at the pre-assessment planning stage and comprise any action that helps to reduce the effect of a disability or difficulty, which places the learner at a substantial disadvantage in the assessment situation. For example, these actions might involve changing or adapting the assessment method, adapting assessment materials or using assistive technology. Reasonable adjustments must not affect the reliability or validity of assessment outcomes and they must not give the learner an assessment advantage over other learners undertaking the same or similar assessments.

How do I apply for a reasonable adjustment for internally assessed BTEC qualifications?

For BTEC qualifications that are internally assessed centres do not need to apply to Edexcel to implement a reasonable adjustment. However, centres must only make reasonable adjustments in line with Edexcel policy and keep a record on Form RA1, which can be found on the Edexcel website.

Practical sessions

Many of the units allow you to include practical activities to help teach the theory of a unit. For the BTEC Level 3 National in Sport/Sport and Exercise Sciences this type of delivery method is encouraged. Where learners can generate practical data about themselves and then apply this in theory sessions, they will be more engaged and motivated.

It is common practice to provide induction sheets and to ask learners to sign informed consent forms for practical lessons. These will set out:

- your rules and recommendations (for example adherence to health and safety legislation)
- standard workshop practices (for example wearing appropriate clothing and not consuming food and drink)
- procedures and requirements for any other practical sessions (for example fitness tests, outdoor and adventurous activities).

Informed consent for young people should be supported by parental/guardian consent.

Health, safety and environmental issues

- Take personal responsibility for health and safety
- Conduct risk assessment, especially during fitness testing and laboratory-based work
- Report accidents and concerns
- If you have a sport and exercise science laboratory, ensure that learners have been inducted, are fully aware of the health and safety rules and know how to work safely in such an environment.

Awareness of legislation within vocational practice

Make learners aware of any relevant legislation for vocational practice. Learners can endanger themselves or others if they do not know and understand what is required. Be sure that you are aware of any new or pending legislation that could impact on practice.

Planning unit delivery

BTEC qualifications are designed to be flexible in their delivery and assessment, giving you the opportunity to construct and deliver programmes to suit your resources and learners. There are two main methods of approaching BTEC delivery: single unit delivery or integrated delivery.

Single unit delivery

BTEC qualifications comprise individual units that represent clusters of learning outcomes. For many sectors, a unit-by-unit approach to delivery is a valid and appropriate method for meeting the learning outcomes and delivering the unit content within the specification. Vocational applications of knowledge gained through unit-by-unit assignments allow learners to reflect on their practice, resulting in focused and in-depth evaluations.

Integration of units

For some sectors, however, it is essential that learners know how the content covered by several units interrelates, as it would in the world of work. In these sectors, unit delivery is best integrated, with assignment evidence mapped across two or more units. Integrated delivery is one of the distinct strengths of BTEC qualifications and can lead to a deeper practical and vocational understanding of the content.

Delivery of units for BTEC Level 3 Nationals in Sport/Sport and Exercise Sciences

A number of units are best placed at the start of the BTEC National programme to provide underpinning knowledge that will help learners gain a better understanding of the more applied units which will follow. Some units, for example the optional Unit 25 (Research Investigation in Sport and Exercise Sciences), are best delivered in the second year of study, so that learners can apply research skills and techniques gained in their first year.

When you look at the specifications, you will see that a selection of mandatory units across the Certificate, Subsidiary Diploma, Diploma and Extended Diploma are nested – that is, the same mandatory units appear in each qualification (depending on the pathway). This can help achievement by allowing learners to attain a higher qualification. Should they need to leave the course after the first year or not do as well as they had hoped, they can still come away with a recognised qualification.

If you are running two separate qualifications, for example the BTEC Level 3 Diploma and Extended Diploma, this system of nesting core units will also give you the opportunity to combine some classes. This can help with the demands of timetabling, particularly if you are short of either tutors or rooms.

Suggestions for integrated assignments

An example of an integrated assignment for Level 3 Nationals in Sport would be to deliver and assess Unit 5: Sports Coaching alongside Unit 3: Assessing Risk in Sport. In the Level 3 Nationals for Sport and Exercise Sciences there are opportunities for integrating Unit 4: Research Methods for Sport and Exercise Sciences and Unit 5: Research Project in Sport and Exercise Sciences. The unit number and grading criteria would have to be given for each task.

For information on how to design assignments that cover one or more units please see page 38. Information on tracking delivery can be found on page 24.

Linking theory and practice in assessment

Encourage learners to conduct research with real sports enterprises. This can be facilitated through work experience and part-time jobs.

Referencing

Encourage learners to adopt formal referencing in their work. It is always valuable for learners to be able to return to useful sources, so good records or notes should be encouraged.

Bibliographies and/or referencing methodologies can be simple or complex depending on the capability of individuals. Remember that learners are being prepared for progression.

Selecting the right units

- Look to the specification for information on which units are mandatory and which are optional, and the specific rules of unit combination for each qualification (Certificate, Subsidiary Diploma, Diploma, Extended Diploma).
- Consider which units your centre is best equipped to deliver (consider staffing, expertise, resources).
- Give learners a choice of units so they might follow a course that is appropriate to their needs, abilities and interests.

A suggested course structure

The tables below provide suggestions as to how you might choose to structure the course. Refer to the specification to check other optional units available and to view rules of unit combination. It is key that you make unit choices that are relevant and appropriate for your learners and centre resources.

When it comes to the **Diploma** and **Extended Diploma** in BTEC Level 3 Sport it is possible for learners to follow one of three pathways:

1. Performance and Excellence
2. Development, Coaching and Fitness
3. Outdoor Adventure.

Look to the specification for full information.

The choice of pathways offered by a centre depends on a number of factors, for example:

- The requirements of local industry
- Physical resources
- Being able to combine groups for common units
- Progression onto Higher Education
- The financial viability of the proposed programme.

The tables here provide suggestions as to how you might choose to structure the **BTEC Level 3 Nationals in Sport**. Please refer to the specification for information on the units available for the BTEC Level 3 Nationals in Sport and Exercise Sciences.

BTEC Level 3 Certificate in Sport:

three mandatory units plus optional units for a combined total of 30 credits

Year 1		
Term 1	Term 2	Term 3
Unit 1: Principles of Anatomy and Physiology in Sport (5 credits, mandatory)	Unit 3: Assessing Risk in Sport (10 credits, mandatory)	Unit 7: Fitness Testing for Sport and Exercise (10 credits, optional)
Unit 2: The Physiology of Fitness (5 credits, mandatory)		

BTEC Level 3 Subsidiary Diploma in Sport:

three mandatory units, one mandatory specialist unit, plus optional units for a combined total of 60 credits

Year 1		
Term 1	Term 2	Term 3
Unit 1: Principles of Anatomy and Physiology in Sport (5 credits, mandatory)	Unit 17: Psychology for Sports Performance (10 credits, optional)	Unit 4: Fitness Training and Programming (10 credits, optional)
Unit 2: The Physiology of Fitness (5 credits, mandatory)	Unit 7: Fitness Testing for Sport and Exercise (10 credits, mandatory specialist)	Unit 5: Sports Coaching (10 credits, optional)
Unit 3: Assessing Risk in Sport (10 credits, mandatory)		

BTEC Level 3 Diploma in Sport (Performance and Excellence):

nine mandatory units plus four optional units for a combined total of 120 credits

Year 1		
Term 1	Term 2	Term 3
Unit 1: Principles of Anatomy and Physiology in Sport (5 credits, mandatory)	Unit 17: Psychology for Sports Performance (10 credits, mandatory)	Unit 4: Fitness Training and Programming (10 credits, mandatory)
Unit 2: The Physiology of Fitness (5 credits, mandatory)	Unit 7: Fitness Testing for Sport and Exercise (10 credits, mandatory)	Unit 5: Sports Coaching (10 credits, optional)
Unit 3: Assessing Risk in Sport (10 credits, mandatory)		

BTEC units: a quick overview

Every BTEC unit is structured in exactly the same way, and this structure has been developed to facilitate your delivery of the course. The notes here give a quick overview. For full details of this structure please see the specification.

Title page

The first page of the specification gives the unit title, QCF level, the credit value and the guided learning hours (GLH)*. It also sets out the unit aim and purpose, the unit introduction and the learning outcomes.

*Guided learning hours: all the times when a number of staff (for example tutor, trainer or facilitator) is present to give guidance.

Unit 8: Fitness Testing for Sport and Exercise

Unit code: A/922/5630
QCF Level 3
Credit value: 10
Guided learning hours: 60

Aim and purpose
The aim of this unit is to enable learners to gain an understanding of fitness testing and the importance of health screening and health monitoring tests.

Unit introduction
In today's society, we are rarely fit into the top of developing countries. Health is now seen as the right rather than the luxury. We take the 90 rather than the 100, and our health (fitness) doesn't seem to allow us to function as well as we once did. Fatigue and increasing aches and pains are becoming more important than ever. It is paramount to the future health of the nation.

This unit introduces learners to fitness testing and health screening performance in a variety of contexts, whether in a sport or work-related fitness. It is aimed at achieving success in sport, and fitness testing often a valuable role in the development of personal fitness. Sports performance is largely performed in a fitness test to determine fitness testing results. Fitness testing results are then used to identify strengths and weaknesses for improvement. Fitness testing results are also used to predict future performance and provide feedback on the effectiveness of an ongoing programme.

Fitness testing can be carried out in a health club setting. Health clubs are often used for cardiovascular and muscular fitness testing. Health clubs are often used for cardiovascular and muscular fitness testing. Health clubs are often used for cardiovascular and muscular fitness testing.

Unit content

Lists the breadth of knowledge, skills and understanding needed to achieve each of the learning outcomes. This outlines what you should cover in your delivery and what your learners need to know.

Assessment and grading criteria grid

The evidence that each learner must produce to achieve pass, merit or distinction. This is the most important section of each unit – units must be taught and assessed by these criteria (not the learning outcomes).

Assessment and grading criteria	Assessment and grading criteria	Assessment and grading criteria
1 Know a range of laboratory-based and field-based fitness tests	1 Know a range of laboratory-based and field-based fitness tests	1 Know a range of laboratory-based and field-based fitness tests
2 Be able to describe health screening techniques	2 Be able to describe health screening techniques	2 Be able to describe health screening techniques
3 Be able to administer appropriate fitness tests	3 Be able to administer appropriate fitness tests	3 Be able to administer appropriate fitness tests
4 Be able to interpret the results of fitness tests and provide feedback	4 Be able to interpret the results of fitness tests and provide feedback	4 Be able to interpret the results of fitness tests and provide feedback

Essential guidance for tutors

Unit-specific guidance on delivery and assessment.

Outline learning plan

This suggests one way you could deliver the unit. Design your own learning plan to mirror your preferred delivery and assessment methods for unit coverage. (This will be crucial where a more integrated delivery profile is adopted.)

Programme of suggested assignments

For guidance only, this table lists ideas for assignments that would cover the grading criteria. It is recommended that you write your own assignments or adapt Edexcel's to meet local needs and resources. Remember: all assignments must be internally verified by your centre before issue to learners to ensure they are fit for purpose.

Learning Outcome	Assignment Idea	Assessment Method
LO 1	As a health fitness instructor, you are required to carry out a range of fitness tests on your members. You are given a list of fitness tests and you are required to write a report on the results of the tests. You are required to write a report on the results of the tests. You are required to write a report on the results of the tests.	Practical observation and assessment. Written report.
LO 2	As a health fitness instructor, you are required to carry out a range of fitness tests on your members. You are given a list of fitness tests and you are required to write a report on the results of the tests. You are required to write a report on the results of the tests. You are required to write a report on the results of the tests.	Practical observation and assessment. Written report.
LO 3	As a health fitness instructor, you are required to carry out a range of fitness tests on your members. You are given a list of fitness tests and you are required to write a report on the results of the tests. You are required to write a report on the results of the tests. You are required to write a report on the results of the tests.	Practical observation and assessment. Written report.
LO 4	As a health fitness instructor, you are required to carry out a range of fitness tests on your members. You are given a list of fitness tests and you are required to write a report on the results of the tests. You are required to write a report on the results of the tests. You are required to write a report on the results of the tests.	Practical observation and assessment. Written report.

Links to National Occupational Standards, other BTEC qualifications and other relevant BTEC units

This table lists the links to National Occupational Standards, other BTEC qualifications and other relevant BTEC units.

Level 3 Sport	Level 3 Sport	Level 3 Sport and Exercise
Health and Fitness	Health and Fitness	Health and Fitness
Development of Personal Skills	Development of Personal Skills	Development of Personal Skills
Skills to Enhance the Body	Skills to Enhance the Body	Skills to Enhance the Body
Health and Fitness	Health and Fitness	Health and Fitness
Health and Fitness	Health and Fitness	Health and Fitness
Health and Fitness	Health and Fitness	Health and Fitness

Functional skills signposting

Opportunities to generate evidence to meet the requirements of functional skills tests.

Functional Skills - Law 2	Functional Skills - Law 2	Functional Skills - Law 2
Independent responses	Independent responses	Independent responses
Confidence in responses	Confidence in responses	Confidence in responses
Reflection	Reflection	Reflection
Team work	Team work	Team work

Programme of suggested assignments

Links to National Occupational Standards, other BTEC units and BTEC qualifications

Essential resources

Indicative reading, resources packs and websites

Functional skills signposting

PLTS signposting

Developing a scheme of work

All BTEC Level 3 National units are structured in a way that should facilitate your delivery of the course. Each unit includes an **outline learning plan**. This is provided as an **example only** to illustrate just one way you might deliver that unit. This plan includes suggested assignments that will cover the unit's grading criteria.

From the outline learning plan you might then develop a more detailed scheme of work. For example, see opposite the outline learning plan for Unit 7 (Fitness Testing for Sport and Exercise) from the BTEC Nationals in Sport and Unit 8 (Fitness Testing for Sport and Exercise) from the BTEC Nationals in Sport and Exercise Sciences, and an example of a scheme of work showing how one might be developed from the other on page 30.

Design your own scheme of work to factor in the needs of your learners and local resources, and to reflect the assignments that you have designed for the unit. (Always ensure that assignments – whether designed by yourself, Edexcel or by others – are internally verified **in your centre** before use; see page 42.)

Delivery notes

The **introductory session** could be delivered using practical activities. For example, when explaining what constitutes appropriate evidence for an assignment, learners could work in groups to identify the various methods for themselves. (For more information on assignment evidence, see page 38.)

When learners are working on assignments, advise them to **remain focused on providing evidence that is relevant and fulfils the criteria**. Many learners will include unnecessary information when writing assignments.

Learners should understand how **continuous assessment** works in terms of interim and formative assessment. All learners should submit interim work or show you where they are with their assignments so that you can feed back on how well they are meeting the tasks against the criteria that they are working towards. If a learner has already met the pass criteria, you should indicate how the learner can achieve merit and distinction grades. If the pass criteria are not yet met, indicate what the learner has to do to get to the appropriate standard.

Group work

Group work is vitally important on BTEC programmes and you should provide opportunities for group work frequently throughout the course. Remember, however, that if any group work contributes towards an assignment, individual learners must be able to provide evidence that they have individually met the criteria.

Looking out for plagiarism

Be careful with the use of the internet, as unfortunately the copying and pasting of text into assignments is happening with alarming regularity. Even at this level, a plagiarism policy may be required to encourage learners to reference the work of others as far as possible. See www.jcq.org.uk for advice on detecting plagiarism. On the first assignment make sure that any cut and paste evidence is rejected and learners are made to do the work in their own words. This will pay dividends in the long run.

How do I cover the unit content?

- Work closely with the specification document to ensure that you fully understand the coverage for each learning outcome within each unit.
- Check your content coverage against the grading criteria.
- Make sure that you understand the distinction between content that must be covered and content that is optional, such as topics listed after 'eg' in the specification – here tutors may use these examples or replace them with relevant alternatives of their own choice.
- Rather than following the assignment ideas in the specification, it may be possible for you to consider smaller assignments over shorter periods of time which will keep your learners engaged. Remember that your assignments must always be designed for **your** learners.
- Use a tracking sheet to plan your assignments and cross check to see if all content is covered. See page 25 for examples of tracking sheets.

Outline learning plan for Unit 7: Fitness Testing for Sport and Exercise (BTEC Level 3 Nationals in Sport) and Unit 8: Fitness Testing for Sport and Exercise (BTEC Level 3 Nationals in Sport and Exercise Sciences)

Topic and suggested assignments/activities and/assessment
Introduction and overview of the unit
Assignment 1: Exploring Laboratory-based and Field-based Fitness Tests (P1, M1). Tutor introduces the assignment brief
Types of fitness tests – group practical exercises exploring the types of fitness tests, purpose, test protocol and test considerations (advantages and disadvantages)
The role and purpose of health screening techniques, including group discussion and review of exemplar health screening questionnaires
Types of health screening questionnaire available – research in pairs and feedback to the group, learners to design their own questionnaires individually
Health monitoring tests – purpose, administration, norms
Assignment 2: Health Screening (P2, P3, P4, M2, D1). Tutor introduces the assignment brief
How to provide effective feedback using a number of practical scenarios – discussion of methods, techniques, dealing with issues, role play
Health monitoring tests – group practical activities to practise test administration
Health monitoring tests – learner practical observations
Conducting fitness tests – group practical exercises to practise test administration and interpretation of results
Assignment 3: How Fit Are You? (P5, M3, P6, M4, D2). Tutor introduces the assignment brief
Administering fitness tests – group practical exercises providing opportunity for learners to administer fitness tests and interpret results against normative data, learner practical observations
Administering fitness tests – learner practical observations
Review of reflective practice of unit and assessment.

**Scheme of work for BTEC National in Sport – Unit 7: Fitness Testing for Sport and Exercise /
BTEC National in Sport and Exercise Sciences – Unit 8: Fitness Testing for Sport and Exercise**

Topic and learning content	Approximate time allocation	Methods of delivery	Resources	Assignments/ Assessments	Assessment grading criteria
Introduction to the unit and learning outcomes	0.5	Learner and tutor interaction Discussion groups	Learners can be given a school/college-devised booklet containing: breakdown of scheme of work; assignment handout and submission dates; library resources; URLs of web links and useful videos.		P1, M1
Introduction to Assignment 1: Exploring Laboratory-based and Field-based Fitness Tests	0.5	Learner work/activities	Hand out Assignment 1. Tutor-led discussion on the content of the assignment brief.		
Types of fitness tests: aerobic endurance	2	Practical activities Discussion groups	Learners take part in fitness tests: <ul style="list-style-type: none"> • Informed consent forms • Multistage fitness test 	Test method Advantages and disadvantages of this type of test	P1 M1
Types of fitness tests: flexibility	3	Practical activities Discussion groups	Learners take part in fitness tests: <ul style="list-style-type: none"> • Flexibility sit and reach test • Shoulder flexibility test 	Test methods Advantages and disadvantages of these types of tests	P1 M1
Types of fitness tests: strength	3	Practical activities Discussion groups	Learners take part in fitness tests: <ul style="list-style-type: none"> • Informed consent forms • 1 Repetition Maximum • Handgrip dynamometer 	Test methods Advantages and disadvantages of these types of tests	P1 M1
Types of fitness tests: speed	2	Practical activities Discussion groups	Learners take part in fitness tests: <ul style="list-style-type: none"> • 35 m sprint 	Test method Advantages and disadvantages of this type of test	P1 M1
Types of fitness tests: anaerobic power	10	Practical activities	Learners take part in fitness tests: <ul style="list-style-type: none"> • Informed consent forms • Wingate test 	Test methods Advantages and disadvantages of this type of test	P1 M1
Types of fitness tests: body composition	4	Practical activities Tutor demonstrations Discussion groups	Learners take part in fitness tests: <ul style="list-style-type: none"> • Skinfold testing • Body Mass Index (BMI) 	Test methods Advantages and disadvantages of these type of tests	P1 M1
Types of fitness tests: muscular endurance	2	Practical activities Tutor demonstrations	Learners take part in fitness tests: <ul style="list-style-type: none"> • One-minute press-up • One-minute sit-up 	Test methods Advantages and disadvantages of these types of tests	P1 M1
Types of fitness tests: tests that require specialist equipment	5	Visit to sport and exercise science laboratory	Learners observe the protocol and administration of a maximal treadmill fitness test and the process of predicting per cent body fat via hydrodensitometry.	Worksheet Test methods Advantages and disadvantages of these types of tests	P1 M1
Health screening techniques	3	Learner and tutor interaction Pair work Class discussions Questionnaires	Learners should have access to examine a range of pre-exercise questionnaires including the physical activity readiness questionnaire (PAR-Q), medical history and lifestyle questionnaire. They should work in pairs to examine each questionnaire, starting with the PAR-Q. Discussion on the main purpose of the questionnaire and whether there are any further questions that could be added to meet this purpose. After each questionnaire, the group should feed back to the rest of the class in a tutor-led discussion.	-	P2
Health screening questionnaires	3	Independent learning Pair work Questionnaires	Learners work in pairs to carry out research on different types of questionnaires. Pairs feed back to rest of group. Learners individually design their own questionnaire.	Individually designed health screening questionnaire	P2

*The timings in this scheme of work reflect the time the learner is engaged in learning for the unit, both with the tutor (guided learning hours) and in their own private study time.

Guided learning hours (GLH): all the times when a member of staff (eg tutor, trainer or facilitator) is present to give guidance ('contact time'). This includes lessons, lectures, tutorials and supervised study in, for example, learning resource centres and workshops. It also includes time spent with learners observing and assessing their work towards assignments.

Topic and learning content	Approximate time allocation	Methods of delivery	Resources	Assignments/ Assessments	Assessment grading criteria
Health monitoring tests	4	Tutor demonstrations Pair work Practical work	Tutor demonstrates a range of health monitoring tests: <ul style="list-style-type: none"> • Heart Rate • Blood Pressure • Lung function • Waist-to-hip ratio • Body Mass Index • Examination of norms tables and interpretation of results 	Written notes interpreting results of own health monitoring tests	–
Health monitoring tests	4	Tutor demonstrations Pair work Practical work	Tutor demonstrates a range of health monitoring tests: <ul style="list-style-type: none"> • Heart Rate • Blood Pressure • Lung function • Waist-to-hip ratio • Body Mass Index • Examination of norms tables and interpretation of results 	Written notes interpreting results of own health monitoring tests	–
Introduction to Assignment 2: Health Screening	0.5	Interactive presentation			
Administering health monitoring tests Practice	2	Group discussion Pair work Practical activities	Hand out assignment brief. Discussion on requirements of assignment brief. Working in pairs, learners practise administering health monitoring tests and provide feedback on test results.	Test data	–
Administering health screening procedures – practice	2.5	Pair work Practical activities	Working in pairs, learners practise administering health procedures for two contrasting individuals and provide feedback on test results.	Test data	P3
Administering health screening procedures Learner practical assessment	2	Practical assessment	Informed consent forms. Learners use health screening procedures for two contrasting individuals and provide feedback on test results. Tutor observation and assessment.	Record of health screening results and verbal interpretation of results	P3
Administering health screening procedures Learner practical assessment	2	Practical assessment	Informed consent forms. Learners use health screening procedures for two contrasting individuals and provide feedback on test results. Tutor observation and assessment.	Record of health screening results and verbal interpretation of results	P3
Administering health screening procedures Learner practical assessment	2	Practical assessment	Informed consent forms. Learners use health screening procedures for two contrasting individuals and provide feedback on test results. Tutor observation and assessment.	Record of health screening results and verbal interpretation of results	P3
Health monitoring tests Learner practical assessment	4.5	Practical activities and assessment (client consultation)	Informed consent forms. Learners administer four different health monitoring tests for two contrasting individuals, interpreting test results: Heart Rate, Blood Pressure, Lung function, BMI.	Observation record of learners administering tests. Verbal interpretation of health screening and test results. Written data sheets.	P3 P4 M2 D1
Health screening Learner practical observations	4.5	Practical activities and assessment (client consultation)	Informed consent forms. Tutor observation – learners use health screening procedures and administer four different health monitoring tests for two contrasting individuals, interpreting test results: heart rate, blood pressure, lung function, BMI	Observation record of learners administering tests. Verbal interpretation of health screening and test results. Written data sheets.	P3 P4 M2 D1
Health screening Learner practical observations	4.5	Practical activities and assessment (client consultation)	Informed consent forms. Tutor observation – learners use health screening procedures and administer four different health monitoring tests for two contrasting individuals, interpreting test results: heart rate, blood pressure, lung function, BMI	Observation record of learners administering tests. Verbal interpretation of health screening and test results. Written data sheets.	P3 P4 M2 D1

*The timings in this scheme of work reflect the time the learner is engaged in learning for the unit, both with the tutor (guided learning hours) and in their own private study time.

Guided learning hours (GLH): all the times when a member of staff (eg tutor, trainer or facilitator) is present to give guidance ('contact time'). This includes lessons, lectures, tutorials and supervised study in, for example, learning resource centres and workshops. It also includes time spent with learners observing and assessing their work towards assignments.

Topic and learning content	Approximate time allocation	Methods of delivery	Resources	Assignments/ Assessments	Assessment grading criteria
Introduction to Assignment 3: Fitness testing How Fit Are You?	0.5	Interactive presentation Pair work	Hand out assignment brief. Discussion on requirements of assignment brief. Learners work in pairs to discuss which fitness tests they plan to administer for a selected individual. Research task – selection and preparation of data tables for interpretation of test results.	Select and administer six different fitness tests for an individual	P5 P6 M3 M4 D2
Administering fitness tests	3	Practical activities	Learners practise the protocols and administration of each of their selected fitness tests and interpretation of test results.		P5 P6 M3 M4 D2
Administering fitness tests	3	Practical activities	Learners practise the protocols and administration of each of their selected fitness tests and interpretation of test results.		P5 P6 M3 M4 D2
Administering fitness tests	3	Practical activities	Learners practise the protocols and administration of each of their selected fitness tests and interpretation of test results.		P5 P6 M3 M4 D2
Fitness testing Learner practical observations and assessment	4	Practical activities and assessment	Informed consent forms. Tutor observation of learners administering six different fitness tests and providing verbal feedback to an individual.	Learner-completed data sheets showing test results. Tutor observation record.	P5 P6 M3 M4 D2
Fitness testing Learner practical observations and assessment	4	Practical activities and assessment	Informed consent forms. Tutor observation of learners administering six different fitness tests and providing verbal feedback to an individual.	Learner-completed data sheets showing test results. Tutor observation record.	P5 P6 M3 M4 D2
Fitness testing Learner practical observations and assessment	4	Practical activities and assessment	Informed consent forms. Tutor observation of learners administering six different fitness tests and providing verbal feedback to an individual.	Learner-completed data sheets showing test results. Tutor observation record.	P5 P6 M3 M4 D2
Fitness testing Learner practical observations and assessment	4	Practical activities and assessment	Informed consent forms. Tutor observation of learners administering six different fitness tests and providing verbal feedback to an individual.	Learner-completed data sheets showing test results. Tutor observation record.	P5 P6 M3 M4 D2
Fitness testing Learner practical observations and assessment	4	Practical activities and assessment	Informed consent forms. Tutor observation of learners administering six different fitness tests and providing verbal feedback to an individual.	Learner-completed data sheets showing test results. Tutor observation record.	P5 P6 M3 M4 D2
Total	100				

*The timings in this scheme of work reflect the time the learner is engaged in learning for the unit, both with the tutor (guided learning hours) and in their own private study time.

Guided learning hours (GLH): all the times when a member of staff (eg tutor, trainer or facilitator) is present to give guidance ('contact time'). This includes lessons, lectures, tutorials and supervised study in, for example, learning resource centres and workshops. It also includes time spent with learners observing and assessing their work towards assignments.

Assessment and grading

Learners work through BTEC units by participating in the learning programme and tackling the assignments you set for them. The ultimate aims in the setting of assignments are to cover the grading criteria for each unit and to set learning within a vocational context. (Full guidance on assignment design can be found on page 38.)

Tell me more about assignments

The number of assignments for each unit will vary. It is up to you how you decide to cover the grading criteria for each unit. Take into account the ability of your cohort of learners, the requirements of the unit itself, local resources and not least your imagination as tutor.

There are drawbacks in setting both too few and too many assignments. If you set too few assignments (by, say, adopting the one-off project approach), you can place too much reliance on large pieces of evidence that may only be available late in the programme. These large assignments can be hard to assess and difficult to put right if things go wrong.

By contrast, setting too many assignments can put a burden on both you and the learners. This can lead to fragmentation of the unit. The unit content, outcomes and grading criteria have generally been produced to provide a coherent package. As such, the assignments should, wherever possible, maintain the coherence and links between the outcomes and grading criteria of the unit.

Your assignment delivery can be through differently paced assignments so that learners realise that they have to

complete some assignments in a short space of time and others in a half or whole term. Some units lend themselves to whole-term pieces of work. Although a large section of a longer assignment may not need to be delivered until nearer to the end of the term, it should still include discrete tasks that can be completed throughout the term. This will help ensure that learners pace themselves appropriately.

Other units can be quite challenging for learners. For example, Unit 1: Principles of Anatomy and Physiology in Sport (in BTEC Level 3 Sport) or Unit 1: Anatomy for Sport and Exercise (in BTEC Level 3 Sport and Exercise Sciences) use scientific terminology, including the names of muscles and bones. For this sort of unit, assignment delivery is usually best organised into discrete sections where learners focus on one body system at a time.

It is good practice to provide learners with a list of assignment deadlines over the period of study. This will help learners to manage their workload. The table below shows part of an example assignment plan (the table could be extended to cover two years).

	September	October	November	December	January
Unit 1	Assignment 1	Assignment 2			Assignment 7
Unit 2			Assignment 4		
Unit 3		Assignment 3		Assignment 6	
Unit 4			Assignment 5		

Kick-starting an assignment

Successful assignments can be sparked off by a trip out of the classroom or sports hall. This could be to a sport science laboratory, a local health club or sports facility. There are also lots of sports museums, many of which are free of charge, and sports-related exhibitions. (Your teaching programme should always lead learners into each assignment.)

Engage your learners

Relate assignments to your learners – include sports that they enjoy or professional players/managers that they have an interest in.

Building a portfolio of evidence

Encourage your learners to compile a portfolio of evidence to meet the assessment and grading criteria for each unit. Dividers can be used to separate assignments related to different units. Learners should also learn how to file their electronic work. If they need to resubmit work later, they will then be able to add extra items from their portfolio. This may help them to attain higher grading criteria by responding to tutor feedback and guidance.

What about grading?

Learners need to provide evidence to meet the grading criteria shown in the unit specification.

- To **pass** a unit, every pass criterion needs to be achieved.
- To gain a **merit**, all the pass and merit criteria need to be achieved.
- To gain a **distinction**, all the pass, merit and distinction criteria need to be achieved.

See the specification for further information on how unit grades are converted to points to calculate a learner's overall grade for the course. Learners who complete the unit but who do not meet all the pass criteria are graded 'unclassified'.

Each criterion generally begins with an operative verb, for example:

Pass = describe (what)
 Merit = explain (how)
 Distinction = justify/evaluate (why)

It is crucial that these same operative verbs are used in the wording of assignment tasks to yield correct evidence from the learner to meet each criterion.

Each assignment must cover part or all of the grading criteria in the unit's assessment and grading grid. This will be dependent on the nature and size of the individual assignment, and how it relates to the content of the unit (or units, if you are integrating unit delivery through assignments). See page 38 for more information.

The grading grid in Unit 7/8: Fitness Testing for Sport and Exercise has a total of 12 pass, merit and distinction grading criteria. Its programme of suggested assignments proposes three separate assignments grouping the grading criteria as follows: P1, M1; P2, P3, P4, M2, D1;

P5, M3, P6, M4, D2. If Unit 7/8 is delivered first, then it may be advisable to break the second assignment (P2, P3, P4, M2 and D1) down so you have some smaller assignments consisting of just P criteria. It is up to you to decide whether to include the merit and distinction criteria in these early stages or to introduce them in later assignments when you are happy that the building blocks of the understanding and application have been achieved.

When the criteria include the assessment of skills or knowledge and understanding that cannot always be evidenced in writing, the use of observation sheets or witness statements is advised – preferably with the unit criteria printed out so that accurate judgements can be made against these criteria. All documents of this nature should be signed and dated to form an authentic audit trail within the learner's assessment profile. For more information about the use of observation records and witness statements see page 39.

Working towards merit and distinction criteria

As the programme progresses, you may find that some learners will struggle to achieve the merit and distinction criteria. It is imperative that in giving feedback on assignment work you clearly show learners what they need to do to improve and to achieve the merit and distinction criteria.

For full information on grading, please see the specification.

Tracking learner achievement

There is an example of a learner tracking grid on page 25. This type of grid enables you to keep a record of learners' progress during the course. If your unit delivery is integrated with other units, the grids facilitate your tracking of which assignments have covered which grading criteria.

It is important to ensure that assessors, internal verifiers and external verifiers have easy access to learner evidence for each of the unit grading criteria. The evidence must be clearly referenced and annotated in each learner's portfolio.

Assignment design

Assignments must be designed to motivate learners, to allow learners to achieve specified unit grading criteria in vocational contexts, and must call on learners to produce varied forms of evidence.

When designing assignments it is possible to:

- have one assignment brief to assess all the grading criteria of a unit
- have two or more smaller assignment briefs for a unit
- allow assessment of criteria from one unit to be integrated with assessment of criteria from another unit.

The assignment brief must include:

- the title and level of the qualification
- the title and number of unit(s) under assessment
- the title of the assignment
- the date the assignment is set (start date)
- submission/assessment date(s)
- the name of the assessor(s)
- the name of the learner
- space for the learner to sign to confirm the work is their own.

In addition to this the use of interim/milestone assessment dates is recommended – especially where assignments cover a number of criteria. It is essential that assignments have a suitable timescale.

The scenario

The assignment should be based within an **interesting vocational scenario** so that learning can be applied to the real world of work.

The tasks

Each assignment is divided into tasks: detailed descriptions of the activities learners will undertake in order to produce evidence to meet the unit's grading criteria and complete the assignment. Each task must:

- specify the extent and nature of evidence that learners should present
- be clear, specific, time-bound, stepped, relevant and realistic
- address the grading criteria it targets, paying careful attention to the operative verb of each criterion ('describe', 'explain', 'evaluate', etc.)
- reference the grading criteria it addresses
- be presented in learner-friendly, engaging and inspirational language, not simply repeating the grading criteria
- address the grading criteria in full, and not split a criterion across more than one assignment.

Evidence

Clearly state what learners are expected to provide as evidence for each task. Forms of evidence can include:

- recorded discussions
- log books/diaries

- artefacts
- presentations
- performance
- brochures/leaflets/posters
- case studies
- web-based material (websites, blogs, VLE, podcasts, etc)
- role plays
- reports/written investigations
- annotated photographs
- promotional material
- work-based evidence.

For evidence that is not written, observation records or witness statements can be completed. See opposite (page 39).

Assessment and grading criteria

- The assignment must state exactly which assessment and grading criteria are being addressed.
- Centres **must not** rewrite any aspect of the unit's assessment and grading criteria nor add their own centre-devised criteria.
- Centres may provide additional guidance, explaining criteria requirements in learner-friendly language, but the exact wording of the published criteria must appear on the assignment.
- An assignment can have one unit as the main focus, but learners may also be producing evidence towards other units at the same time.

Local needs

Assignment briefs should always be developed and adapted to meet the needs of learners at your centre and to take account of your centre's resources. They must also be checked by someone in your centre (internally verified) to ensure they are fit for purpose **before** they are given to learners (for more information on this see page 42).

The assignment brief will often need to be supplemented with further information, for example:

- a demonstration
- handouts
- videos or DVDs
- references to books
- references to websites
- visits to source primary research materials within the locality of your centre
- visits to sport and exercise science laboratories, leisure centres, museums, exhibitions or other places where research can be undertaken
- visits from guest speakers/local practitioners.

An example of an assignment brief can be found on page 50.

Learner responsibility

Learners need to take responsibility for completing their assignments. Many centres have instigated learner agreements or contracts, which learners sign to commit themselves to meeting all deadlines and the other demands of completing their programme. Learners need to produce assessment evidence that is all their own work – plagiarism can be an issue. It is important that learners are instructed on the correct use of referencing. For more information, see Edexcel's *Centre Guide to Managing Quality: Policies, Procedures and Practice*.

Engage your learners

The most successful assignments will engage and excite learners to take responsibility for the progress of their own learning.

Observation records

An observation record is used to provide a formal record of an assessor's judgement of learner performance (for example, during presentations, practical activity, performance or role play) against the targeted grading criteria. The record:

- will relate directly to the grading criteria in the unit specification
- may confirm achievement or provide specific feedback of performance against QCF standards for learner achievement
- will provide primary evidence of performance
- will be sufficiently detailed to enable others to make a judgement as to quality and whether there is sufficient evidence of performance
- confirms that QCF standards for learner achievement have been met.

Observation records should be accompanied by supporting additional evidence. This may take the form of visual aids, video or audio tapes, CDs, photographs, handouts, preparation notes, cue cards, diary records, log books and/or peer assessment records. Observation records should also:

- note how effectively these were used to meet the assessment criteria
- record the assessor's comments
- be evidenced in a learner's portfolio when assessment is carried out through observation, together with relevant supporting evidence
- be completed by the assessor who must have direct knowledge of the specification to enable an assessment decision to be made
- be signed and dated by the assessor and the learner
- also include the learner's comments.

An observation record can have greater validity than a witness statement since it is capable of directly recording an assessment decision without reference to others.

Witness statements

A witness statement is used to provide a written record of learner performance (process evidence) against grading criteria. Someone other than the assessor of the qualification/unit may complete it. This may be an assessor of a different qualification or unit, a work placement supervisor, a technician, a learning resources manager or anyone else who has witnessed the performance of the learner against given assessment criteria. It can be someone who does not have direct knowledge of the qualification, unit or assessment criteria as a whole but who is able to make a professional judgement about the performance of the learner in the given situation.

The quality of a witness statement is greatly improved and enables the assessor to judge the standard and validity of performance against the assessment criteria if:

- the witness is provided with clear guidance on the desirable characteristics required for successful performance by including a checklist
- the grading criteria are present on the witness testimony (this may need further amplification for a non-assessor)
- the learner or witness also provides a statement of the context within which the evidence is set.

The witness statement does not confer an assessment decision. The assessor must:

- consider all the information in the witness statement
- note the relevant professional skills of the witness to make a judgement of performance
- review supporting evidence when making an assessment decision
- review the statement with the learner to enable a greater degree of confidence in the evidence
- be convinced that the evidence presented by the witness statement is valid, sufficient and authentic.

When a number of witnesses are providing testimonies:

- every witness testimony should be signed and dated by the witness
- information of their job role/relationship with the learner should also be available.

These details add to the validity and authenticity of the testimony and the statements made in it. Centres should note that witness testimonies can form a vital part of the evidence for a unit(s) but they should not form the main or majority assessment of the unit(s).

Example forms for observation records and witness statements are given on pages 40 and 41 and can be modified to show a centre's own logo. These are available in Word format on the CD-ROM in your Specification Pack.

Observation record (by tutor)

Learner name			
Qualification			
Unit number and title			
Description of activity undertaken (please be as specific as possible)			
Assessment and grading criteria			
How the activity meets the requirements of the assessment and grading criteria			
Learner signature		Date	
Assessor signature		Date	
Assessor name			

Witness statement (by external observer)

Learner name			
Qualification			
Unit number and title			
Description of activity undertaken (please be as specific as possible)			
Assessment and grading criteria			
How the activity meets the requirements of the assessment and grading criteria, including how and where the activity took place			
Witness name		Job role	
Witness signature		Date	
Learner name			
Learner signature		Date	
Assessor name			
Assessor signature		Date	

Internal verification of assignment briefs

Internal verification is a quality assurance system you must use to monitor assessment practice and decisions. It is there to ensure that:

- assessment and grading are consistent across the programme
- assignments are fit for purpose
- assessment decisions accurately match learner work (evidence) to the unit assessment and grading criteria
- standardisation is a feature of centre assessment practice.

Every assignment must be internally verified **before it is issued** to learners. The internal verification should be done by a tutor who is vocationally competent and understands the BTEC Level 3 Nationals in Sport/Sport and Exercise Sciences units. This is to ensure that:

- the tasks and evidence will allow the learner to address the targeted criteria
- the assignment is designed using clear and accessible language
- learners' roles and tasks are vocationally relevant and appropriate to the level of the qualification
- equal opportunities are incorporated.

The system used to do this is a matter for individual centres. Edexcel fully supports the use of the centre's own quality assurance systems if they ensure robust internal standardisation.

Internal verification of assignment briefs should always be reported and recorded. If action is required, the assessor should complete this and return the form to the internal verifier for sign off. Once the assignment is verified as fit for purpose, it may be issued to the learners.

Internal verifiers are advised to use the paperwork that is available in the CD-ROM in the Specification Pack (see the example on page 52) as this meets all Edexcel requirements.

Internal verification is to be seen as a supportive process. If an assignment is not fit for purpose, the internal verifier should return the assignment with appropriate comments. There should be a deadline set for the amendments to be made and, when all is approved, the documents should be signed and dated to give the team an auditable document. Tutors can engage in professional discussions where there is disagreement so that all standards and decisions are shared and understood.

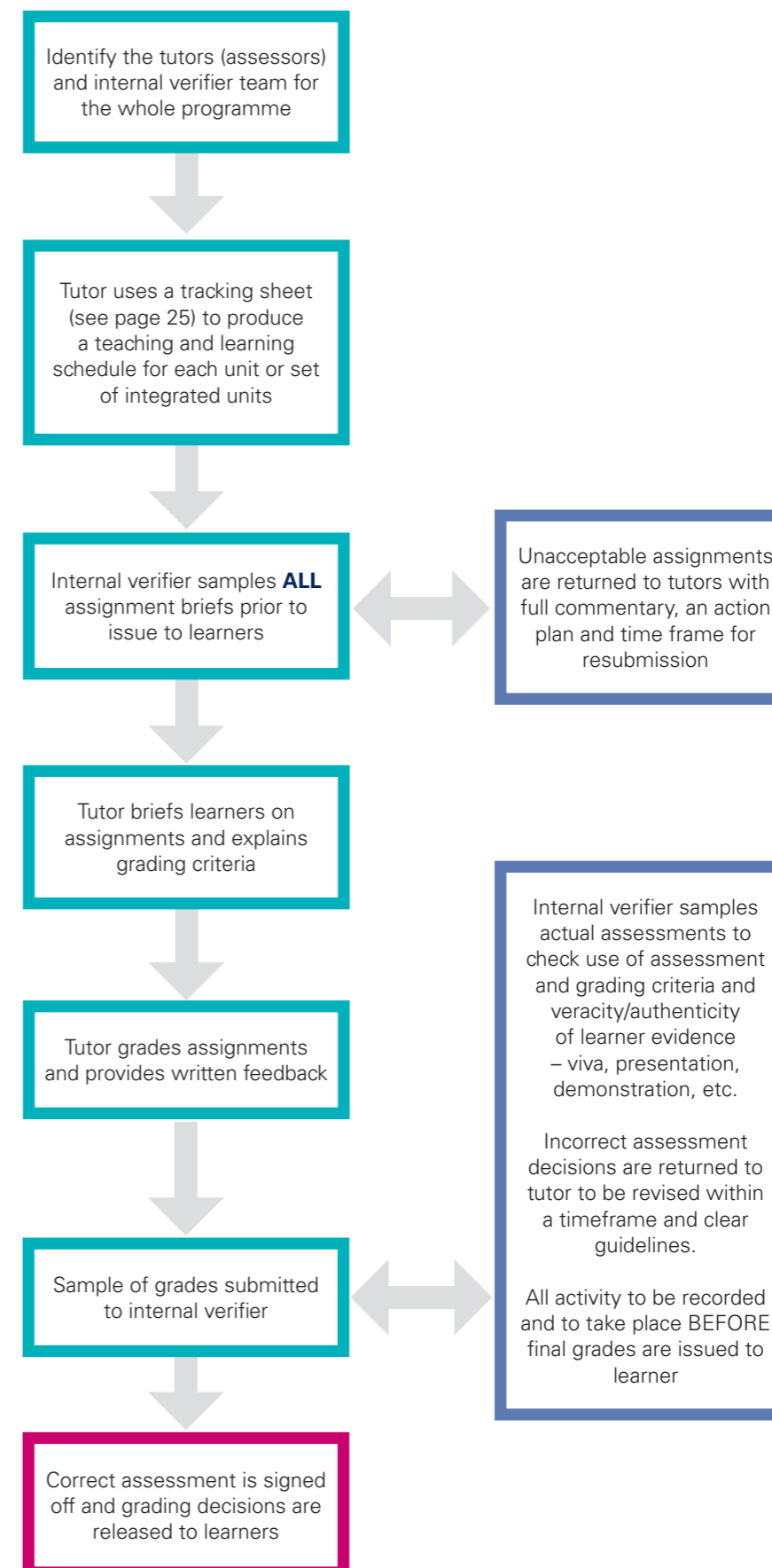
For an example of an internal verification form for an assignment brief, see page 52

Lead internal verifiers (new from 2010)

Each centre's group of programmes has a lead internal verifier who coordinates the work of other internal verifiers and offers leadership on issues of internal standardisation and related training. The lead internal verifier will be expected to gain accreditation via the Edexcel online OSCA2 test. The achievement of this test will permit release and certification of learner attainment. For more information on becoming a lead internal verifier, see www.btec.co.uk

(Some programmes may be subject to annual sampling prior to release and certification of learner attainment.)

Procedure for internal verification



Grading an assignment

When designing an assignment it is key that you set the level of expectation for learners and provide guidance related to the kinds of evidence that they should be producing. Assignments will not, ideally, require a uniform response, otherwise you will have difficulty in assessing across the range of grading criteria – differentiated learning would be constrained. Learners should have the freedom to develop their own responses within the demands of the learning outcomes and grading criteria.

When grading an assignment it is good practice to use a form such as that shown on page 65 (this is available on the CD-ROM in your Specification Pack). Alternatively, you can devise your own assessment record sheets but these should always allow feedback to learners on their performance against the criteria. It is also good practice to have space for learners to comment on their own work. It is important to give learners positive feedback that tracks and records their learning journey and achievement but also identifies areas for improvement. This is very valuable for learners who have missed criteria and need further encouragement and direction to achieve these criteria.

Learners normally receive feedback after each assignment has been assessed and internally verified.

Maximising learner achievement

Unit grades need not be submitted to Edexcel until the centre wishes to claim certification. Learners should have every opportunity to obtain the best unit grades they are able to achieve.

Learners could be encouraged to tackle criteria that they have missed or are weaker in understanding and achieving via newly designed assignments. Mini assignments or a second opportunity to meet the criteria in a fresh way is good educational practice. Newly designed assignment briefs must be internally verified before issue to learners.

Key points

- **Always use the specification document** and cross reference learner evidence to the learning outcomes, unit content and the unit's assessment and grading grid to ensure that the criteria specified in the assignment are fully met. For merit and distinction grades, the decisions should not be based on quantity of evidence presented but on its quality (in meeting the criteria).
- **The guidance section of each unit specification will assist you** in reaching a decision. Delivery teams will find that standardisation prior to major unit assessment will be very useful in setting the standard of individual assessors' decisions. Use of a sample of learner work across the grade boundaries, especially if there are 'cusp' decisions, is the best way to set the team standard. This activity builds confidence among the assessor team. A post-standardisation session can be very useful for further discussions on the quality and standard of the work that has been assessed and it provides an opportunity for internal verification to take place before grading decisions are confirmed to learners.
- **Good feedback can identify the way that learners can achieve a higher grade** and positive feedback will assist learners who may be diffident about gaining more than a pass grade, which is a common problem with learners who are only prepared to do the bare minimum to pass. Assessors can encourage learner self-esteem and confidence by setting clear expectations. The feedback section can also provide learners with an individual learning plan, giving clear targets for completion, dates and deadlines.

Improving grades

In general, BTEC units expect a gradual improvement in grades over the progress of the course as learners become more familiar with the degree of independence and self-responsibility that is required to meet the higher grading criteria.

For an example of a graded assignment, see page 48

Internal verification of assessor's comments

Once assignments have been graded, the internal verifier should sample these to ensure that the assessor is:

- conducting assessment in a fair and equitable way
- using the specification document
- using grading criteria
- checking the veracity and authenticity of learner evidence through vivas, presentations, demonstrations, etc.

Centre teams can hold standardisation sessions to establish the veracity and accuracy of the team's assessment decisions.

Any incorrect assessment decisions will be returned to assessors to be revised within a timeframe. Where the internal verifier deems the assessment decisions to be invalid, there must be dialogue between assessor and internal verifier to discuss the issues raised. This dialogue should be documented on the internal verification form together with the action to be taken and the resulting grading outcome. There must be a clear audit trail of the closing of the 'quality loop'.

All activity should be recorded and should take place before final grades are issued to learners.

For an example of an internal verification form for assessor's decisions, see page 66.

Frequently asked questions

How many assignments should there be?

As many as are necessary to assess the unit. Determine the most appropriate assessment strategy for the unit, taking into account the ability of your cohort of learners, the requirements of the unit, local resources and your imagination as tutor.

If you set too few assignments (by, say, adopting the one-off project approach), you can place too much reliance on large pieces of evidence that may only be available late in the programme. These large assignments can be hard to assess and difficult to put right if things go wrong.

By contrast, setting too many assignments puts a burden on both you and the learners. This can lead to fragmentation of the unit. The unit content, outcomes and grading criteria have generally been produced to provide a coherent package. As such, the assignments should, wherever possible, maintain the coherence and links between the outcomes and grading criteria of the unit.

When should assignments be set?

There are two issues here when considering timing. First, be aware of the possibility of assessment overload – when there is a bunching of assignment deadlines across a number of units at any point in the programme. To avoid overload, detailed planning needs to take place at programme level to spread the assessment load. Second, there is the issue of identifying the most appropriate place within the unit for the assignment. This will be determined by a combination of the nature of the unit and the way the outcomes link together plus the overall approach taken to teaching and learning.

As a third consideration, if you are aware of the timing of external quality checks, it is good to prepare for this early in the year by setting some assignments and assembling all learner work. This will take away any pressure on your delivery and assessment.

Can tests be used?

Any valid method of assessment can be used and this includes tests in the appropriate place. However, the assessment must be made against the grading criteria set within the unit and this applies equally to tests as to any other method. The overriding issue is the need to prepare assessment instruments that are fit for purpose, challenging, vocationally relevant and provide a vocational focus that will interest and engage the learner.

Pacing for your learners

Taking Unit 7/8 Fitness Testing for Sport and Exercise as an example, the outcomes and assessment criteria can be covered through three assignments as suggested in the unit specifications.

A developmental delivery plan which allows learners to practise the skills that they have learnt and apply them to assignment tasks will help your learners to increase their confidence and understanding of the subject content and applied nature of some of the topics.

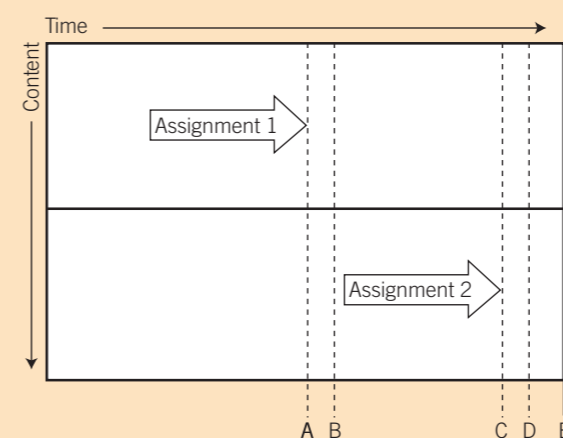
What if the work is handed in late?

Deadlines are an important aspect of any work. In general, time deadlines should be given for the end of the unit. Centres need to inform learners about their policy towards late work. If a learner hands in work late without prior negotiation, then the centre may decline to mark it. If the centre marks the work, then all grades applicable to the unit must be considered. If the work is marked, the learner must not be punished for handing it in late. As these programmes are vocational, some assignments will not permit late submissions, such as those that involve the performance to an audience or production of a newspaper.

How can learners be encouraged to achieve more than just a pass?

The assignment design, guidance and support are all important factors in getting learners to achieve at the highest possible level. It must be recognised that learners do have choice and if they make a conscious and informed choice to achieve only at pass level then there is probably very little anyone can do. However, experience shows that it is highly likely that learners who become fully engaged in their BTEC programme will find the way that you apply the assessment model, through interim varied assessment, tutorials and clear recording of the criteria that they are achieving, encourages them to aim higher.

Example of an assessment plan for two assignments



The first assignment covers the first outcome and has an initial deadline for feedback indicated at A. If this deadline is met, the work is reviewed and detailed feedback provided to learners at B. Learners can then rework the evidence, based on the feedback provided and resubmit for final assessment at E.

The deadline for feedback on assignment 2 is C, with feedback provided at D and final submission for assessment also at E. To encourage learners to meet the deadlines, work submitted after point B will only be assessed and then returned with feedback at D. Learners' work is only ever double-handled using this process but it does provide learners with an opportunity to reflect on their work and achieve at the highest possible level.

Concerns about the advantages in this system for those learners who 'take more time' to achieve are balanced out by the advantages gained by the informed feedback and, possibly, the removal of the work burden for those who meet deadlines. What this system does achieve is that it encourages learning based on sound assessment decisions.

What if a learner doesn't achieve a pass?

Feedback and support should be provided to ensure that the learner is aware of any failings in the work presented for assessment and then given the opportunity to rectify these failings through some means (such as reworking material, taking advantage of a further assessment opportunity, etc).

If the learner has not attempted assessment, then the programme team could indicate that the unit/course had not been completed by the learner, and in such cases the qualification certificate would be withheld.

How many times can a learner re-work or re-sit an assignment?

The issue here is the validity of the assessment instrument. If a learner is simply going round and round on a single task or activity brief, then the validity of the assessment must come into question and the tutor should consider the need for an alternative assessment instrument.

If the assignment is prompting learning, then that is what the course is about in the first place and therefore re-work is to be encouraged whenever applicable.

The final assessment evidence simply needs to be a valid and reliable measure of the learner's current level of achievement against the outcomes and criteria of the unit.

Improving grades

Many centres take the approach enabling learners to hand in a formative piece of work and then address the feedback given by the assessor; the resubmission is the summative piece of work and is the final hand-in.

There is also the option to include 'review' weeks in your timetabling to allow learners to have another resubmission of the assignment. Learners must have appropriate opportunities to meet the unit assessment and grading criteria. Whatever your centre decides, you must ensure you have a centre Assessment Policy document that outlines the resubmission procedure for BTEC programmes. This document must be made accessible to learners and can be included in a learner handbook.

Appendix: A sample assignment

A sample assignment follows for the unit **Fitness Testing for Sport and Exercise**. This is Unit 7 in the BTEC Level 3 Nationals for Sport, and Unit 8 in the BTEC Level 3 Nationals for Sport and Exercise Sciences.

The assignment that follows requires learners to select and safely administer six different fitness tests for a selected individual, recording the findings. Following fitness testing, learners need to give feedback to the selected individual, describing the test results and interpreting their levels of fitness against normative data. The tests selected must be safe and appropriate for the individual to be tested. Test selection will depend on factors including the individual's age, fitness levels, medical history, physical activity history, and sport and activity likes and dislikes. Centres will also need to consider the equipment and facilities they have available for fitness testing.

All assignments you set for your learners must be internally verified

It is intended that sample assignments are used as examples of good practice. However, they may not be entirely appropriate for every learner in every centre. You are advised to make suitable amendments to sample assignments in response to your own centre's requirements to meet the needs of your learners. All sample assignments used, whether amended or not, must be internally verified by a suitable person at your centre.

All learners are different and will approach their assignments in different ways

The sample assignment that follows shows how one learner answered a brief to achieve pass, merit and distinction level criteria. The learner work shows just one way in which grading criteria can be evidenced. There are no standard or set answers. If your assignment is fit for purpose, and if your learners produce the required evidence for each task, then they will achieve the grading criteria covered by the assignment.

Sample assignment front sheet

Learner name		Assessor name	
John Russell		Mrs Clara Wells	
Date issued	Completion date	Submitted on	
1 December 2010	3 February 2011	1 February 2011	
Qualification		Unit	
BTEC Level 3 National in Sport BTEC Level 3 National in Sport and Exercise Sciences		Unit 7/8: Fitness Testing for Sport and Exercise Assignment number: 3	

Assignment title	Fitness Testing
In this assessment you will have opportunities to provide evidence against the following criteria. Indicate the page numbers where the evidence can be found.	

Criteria reference	To achieve the criteria the evidence must show that the learner is able to:	Task no.	Page numbers
P5	Select and safely administer six different fitness tests for a selected individual recording the findings	1	1–9
M3	Justify the selection of fitness tests commenting on suitability, reliability, validity and practicality	2	observation record
P6	Give feedback to a selected individual, following fitness testing, describing the test results and interpreting their levels of fitness against normative data	3	observation record
M4	Compare the fitness test results to normative data and identify strengths and areas for improvement	3	observation record
D2	Analyse the fitness test results and provide recommendations for appropriate future activities or training	3	observation record

Learner declaration	
I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.	
Learner signature: <i>John Russell</i>	Date: <i>1 February 2011</i>

Sample assignment brief

Unit title	Unit 7/8 Fitness Testing for Sport and Exercise
Qualification	BTEC Level 3 National in Sport/Sport and Exercise Sciences
Start date	1 December 2010
Deadline date	3 February 2011
Assessor	Mrs C Wells

Assignment title	Fitness Testing
The purpose of this assignment is to:	Enable learners to gain an understanding of fitness testing procedures, test administration and how to give feedback to an individual regarding their fitness test results.
Scenario	You are working as a fitness instructor in a health and fitness club. Club members book appointments with you for fitness testing and assessment. You look in the diary and see that one person is booked in for a fitness assessment with you.
Task 1	<p>You are to administer practical fitness tests for a selected individual.</p> <p>i. Select and safely administer six different fitness tests for the individual, recording your findings on data sheets. Submit the six completed data sheets for the individual. Your assessor will also provide a witness statement.</p> <p style="text-align: right;">This provides evidence for P5</p>
Task 2	<p>ii. During the fitness assessment you will need to justify verbally to the individual why you selected the six fitness tests you did, commenting on their suitability, reliability, validity and practicality. Your assessor will provide an observation record to confirm whether this criterion has been achieved.</p> <p style="text-align: right;">This provides evidence for M3</p>
Task 3	<p>iii. Following fitness testing, provide verbal feedback to the individual, describing their test results, and interpret their fitness levels against normative data (P6). Use published data tables and your completed data sheets to interpret the fitness test results for the individual.</p> <p>iv. During the feedback session you will need to compare the fitness test results to normative data and identify verbally the strengths and areas for improvement for the individual (M4).</p> <p>v. To meet D2 you should then provide the individual with a verbal analysis of their fitness test results, offering recommendations for appropriate future activities or training.</p> <p>Submit the fitness test results (completed data sheets) for the individual, together with the references for the published data tables used in the interpretation of test results. Your unit assessor will provide an observation record to confirm criteria met/not met for Task 3.</p> <p style="text-align: right;">This provides evidence for P6, M4, D2</p>

This brief has been verified as being fit for purpose

Assessor	Mrs C Wells	Date	19 November 2010
Signature	Clara Wells	Date	19 November 2010
Internal verifier	Mr I Worrell	Date	19 November 2010
Signature	Ian Worrell	Date	19 November 2010

Supplementary material

Sources of information

Textbooks

Adams GM – *Exercise Physiology Laboratory Manual: Health and Human Performance* (McGraw Hill Higher Education, 2001) ISBN: 9780072489125

Adams M, Barker R, Gledhill A, Lydon C, Mulligan C, Phillippo P, Sutton L – *BTEC L3 National Sport Student Book 1* (Edexcel, 2010) ISBN: 9781846906510

Adams M, Barker R, Davies W, Gledhill A, Lydon C, Mulligan C, Sergison A, Sutton L, Wilmot N – *BTEC L3 National Sport Student Book 2* (Edexcel, 2010) ISBN: 9781846906503

Adams M, Barker R, Davies W, Gledhill A, Lydon C, Mulligan C, Phillippo P, Sergison A, Sutton L – *BTEC L3 National Sport TRP* (Edexcel, 2010) ISBN: 9781846906541

Adams M, Barker R, Davies W, Gledhill A, Hancock J, Lydon C, Mulligan C, Phillippo P, Sutton L, Taylor R – *BTEC L3 National Sport and Exercise Sciences Student Book* (Edexcel, 2010) ISBN: 9781846908972

Adams M, Barker R, Davies W, Gledhill A, Hancock J, Lydon C, Mulligan C, Phillippo P, Sutton L, Taylor R – *BTEC L3 National Sport and Exercise Sciences TRP* (Edexcel, 2010) ISBN: 9781846908965

Allen MB – *Sports Exercise and Fitness: A Guide to Reference and Information Sources* (Libraries Unlimited Inc, 2005) ISBN: 9781563088193

American College of Sports Medicine – *ACSM's Guidelines for Exercise Testing and Prescription 7th edition* (Lippincott Williams & Wilkins, 2005) ISBN: 9780781745901

American College of Sports Medicine – *ACSM's Health-Related Physical Fitness Assessment Manual* (Lippincott Williams & Wilkins, 2007) ISBN: 9780781775496

Barker R et al – *BTEC National Sport: Option Units* (Heinemann, 2004) ISBN: 9780435455095

Coulson M – *The Fitness Instructor's Handbook: A Complete Guide to Health and Fitness – Fitness Professionals* (A & C Black, 2007) ISBN: 9780713682250

Franks BD, Howley ET – *Fitness Leader's Handbook* (Human Kinetics Europe, 1998) ISBN: 9780880116541

Hazeldine R – *Fitness for Sport* (The Crowood Press, 2000) ISBN: 9781861263360

Heyward VH – *Advanced Fitness Assessment and Exercise Prescription* (Human Kinetics, 2006) ISBN: 9780736057325

Howley ET, Franks BD – *Health Fitness Instructor's Handbook* (Human Kinetics Europe, 2003) ISBN: 9780736042109

National Coaching Foundation – *Physiology and Performance – NCF Coaching Handbook No 3* (Coachwise Ltd, 1987) ISBN: 9780947850241

Powers SK, Howley ET – *Exercise Physiology: Theory and Application to Fitness and Performance* (McGraw Hill Higher Education, 2006) ISBN: 9780071107266

Sharkey BJ – *Physiology of Fitness 3rd edition* (Human Kinetics, 1990) ISBN: 9780873222679

Sharkey BJ, Gaskill SE – *Fitness and Health* (Human Kinetics, 2006) ISBN: 9780736056144

Skinner J – *Exercise Testing and Exercise Prescriptions for Special Cases: Theoretical and Clinical Applications* (Lippincott Williams & Wilkins, 2005) ISBN: 9780781741132

Watson AWS – *Physical Fitness and Athletic Performance; A Guide for Students, Athletes and Coaches* (Longman, 1996) ISBN: 9780582091108

Journals

Exercise and Sport Sciences Reviews
Research Quarterly for Exercise and Sport
International Journal of Sports Science and Coaching
Medicine and Science in Sports and Exercise
American College of Sport Medicine's Health and Fitness Journal
British Journal of Sports Medicine

Useful websites for this assignment include:

British Association of Sport and Exercise Sciences
 Human Kinetics
 Top End Sports
 Sport Science
 Sports Coach UK
 Coachwise
 American College of Sports Medicine

www.bases.org.uk
www.humankinetics.com
www.topendsports.com
www.sportsci.org
www.sportscoachuk.org
www.1st4sport.com
www.acsm.org

Sample internal verification of assignment brief

Qualification	BTEC National in Sport/Sport and Exercise Sciences		
Unit	Unit 7/8 Fitness Testing for Sport and Exercise – Assignment 3		
Assessor	Mrs C Wells		
Internal verifier checklist		Comments	
Are accurate programme details shown?	Y		
Are accurate unit details shown?	Y		
Are clear deadlines for assessment given?	Y	Clear dates are provided on the assignment front sheet and brief.	
Is this assignment for whole or part of a unit?	P	This is the final assignment of three assignments that cover the unit.	
Are assessment criteria to be addressed listed?	Y	P5, M3, P6, M4, D2	
Does each task show which criteria are being addressed?	Y	Criteria are shown against each task so learners can clearly identify where assessment opportunities occur.	
Are these criteria actually addressed by the tasks?	Y	P5 is Task 1 M3 is Task 2 P6, M4 and D2 are covered in Task 3	
Is it clear what evidence the learner needs to generate?	Y	To administer six different fitness tests for an individual, documenting and interpreting their test results. Observation records/witness testimony will also be used to confirm achievement of target criteria. This is essentially a practical task and much of the evidence generated by the learner will be verbal.	
Are the activities appropriate?	Y	It is refreshing to see that learners will provide much of their evidence verbally to the individual tested, which will be supported by assessor observation records/witness testimony. This gives the whole assessment a vocational feel, and makes a change from the 'written report'.	
Is there a scenario or vocational context?	Y	Appropriate scenario provided.	
Is the language and presentation appropriate?	Y	The language is appropriate for Level 3 learners and presentation is clear.	
Is the timescale for the assignment appropriate?	Y	Learners have sufficient time to learn fitness test methodology and test administration. The timescale is sufficient to undertake the fitness tests and individual assessments.	
Overall is the assignment fit for purpose?	Y	Assignment is fit for purpose and addresses the target criteria.	
* If "No" is recorded and the internal verifier recommends remedial action before the brief is issued, the assessor and the internal verifier should confirm that the action has been undertaken			
Internal verifier	Mr I Worrell		
Signature	<i>Ian Worrell</i>	Date	<i>19 November 2010</i>
Action required:			
No action required for this assignment. The assignment brief is fit for purpose.			
Action taken:			
NA			
Assessor	Mrs C Wells		
Signature	<i>Clara Wells</i>	Date	<i>19 November 2010</i>
Internal verifier	Mr I Worrell		
Signature	<i>Ian Worrell</i>	Date	<i>19 November 2010</i>

Sample learner work

Sample learner work: page 1

Learner name: John Russell

Fitness Testing

Task 1: Select and safely administer six different fitness tests for an individual, recording your findings on data sheets (P5).

The individual I have selected to participate in the fitness testing is Chris Kahlo, who also attends Ramsay College and is studying the ND in Business.

Basic Data for Chris is shown (below):

Name: Chris Jefferson Kahlo
Age: 17 years
Height: 1.79 m
Weight: 80 kg

At the start, I spoke to Chris about what fitness tests he would be interested in doing, and took this into account, so I know that the results are going to be of use and interest to him. Chris told me he is particularly interested in finding out what his aerobic fitness is like and also his body fat, because he's training at the moment to try and tone up. Chris enjoys running and cycling, and wants to push himself hard in the tests, so this also helped me with the test selection, because I wanted to try and make sure the tests would be specific and suitable for him. Knowing what Chris was interested in has helped me with the selection of six different fitness tests.

The six different fitness tests I will administer for Chris are:

1. Sit and reach test (for flexibility)
2. Multi-stage fitness test (for VO₂ max – aerobic endurance, which is what Chris was interested in finding out)
3. Wingate test (for anaerobic power, Chris likes cycling)
4. Skinfold testing (for percent body fat, Chris was interested in finding out his result)
5. Grip dynamometer (for handgrip strength)
6. 35m sprint test (for speed)

I have completed a data sheet for each test, showing Chris's results.

Sample learner work: page 2

Learner name: John Russell

Ramsay College of FE

Sit and Reach Test

Name: Chris Kahlo

Date: 07.12.2010

Gender: Male

Wt = 80 kg

Ht = 1.79 m

Trial 1 = 13 cm

Trial 2 = 13 cm

Average = 13 cm

Re-test (same day):

Trial 1 = 14 cm

Trial 2 = 14 cm

Average = 14 cm

Units of measurement = cm

Notes: *We used a sit-and-reach box (Cranlea Medical).*

Sample learner work: page 3

Learner name: John Russell

Ramsay College of FE

Multi-stage Fitness Test

Name: Chris Kahlo

Gender: male

Trial 1 Result: Level 9 Shuttle 11 = VO_2 max = 46.8 ml/kg/min

Date: 10.12.2010

Trial 2 Result: Level 10 Shuttle 4 = VO_2 max = 48.0 ml/kg/min

Date: 15.12.2010

Notes: *A data table was used to look up the VO_2 max result (ml/kg/min) from the level and shuttle Chris reached. Equipment – multi-stage fitness test audiotape, tape recorder, 4 cones, 2 people acted as spotters.*

Sample learner work: page 4

Learner name: John Russell

Ramsay College of FE

Wingate Anaerobic Cycle Test Data Sheet 1

Name: Chris Kahlo

Date: 12.01.2011

Gender: male

Body weight = 80 kg

Weight to add to basket

= body weight x 0.075

= 6 kg

– 1 kg for the basket weight

= 6 – 1

= 5 kg basket weight

Time (s)	RPM
5	118
10	118
15	115
20	114
25	109
30	106

Calculation of Chris's anaerobic power:

Time (s)	Anaerobic Power (W)
5	$6 \times (118/60 \times 5) \times 11.765 = 694.1W$
10	$6 \times (118/60 \times 5) \times 11.765 = 694.1W$
15	$6 \times (115/60 \times 5) \times 11.765 = 676.5W$
20	$6 \times (114/60 \times 5) \times 11.765 = 670.6W$
25	$6 \times (109/60 \times 5) \times 11.765 = 641.2W$
30	$6 \times (106/60 \times 5) \times 11.765 = 623.5W$

Peak anaerobic power result = 694.1 W

Sample learner work: page 5

Learner name: John Russell

Ramsay College of FE

Wingate Anaerobic Cycle Test Data Sheet 2

Name: Chris Kahlo

Date: 12.01.2011

Anaerobic capacity (kgm–30s)

= total revs in 30s x 6m x Force (kg)

= 57 x 6 x 6

= 2052 (kgm–30s)

Workings to show total revs for Chris:

Time (s)	5s revs	
5	$118/60 \times 5$	9.83
10	$118/60 \times 5$	9.83
15	$115/60 \times 5$	9.58
20	$114/60 \times 5$	9.50
25	$109/60 \times 5$	9.08
30	$106/60 \times 5$	8.83
Total revs	56.65	= 57 (closest rev)

Anaerobic capacity (W)

= kgm–30 s/3

= 2052/3

= 684 W (average mean power)

Calculation of power decline:

$$100 \times \frac{(\text{peak anaerobic power} - \text{low anaerobic power})}{\text{peak anaerobic power}} = \% \text{ fatigue rate}$$

$$= 100 \times \frac{(694.1 - 623.5)}{694.1} = 10.17 \% \text{ fatigue rate}$$

Wingate Anaerobic Cycle Test

Informed Consent Form

1. The purpose of the test is to determine maximal anaerobic power and maximal anaerobic capacity.
2. This will be determined using the Wingate anaerobic cycling test.
3. The subject will carry out standard warming-up and cooling-down procedures. For warm-up, the subject will need to cycle for between 2 and 4 minutes at an intensity sufficient to cause the heart to beat at 150–160 bpm. Cycling during the warm-up will need to include two or three all-out bursts of cycling for 4–8 seconds each. For cool-down, and to minimise risk of fainting, the subject will need to cycle with no load on the basket, for 2–3 minutes after the test. The subject will be given help to get off the bike and should then assume the instructed recovery position, as a precaution.
4. The subject will be required to perform a 30-second all-out cycling test using a Monark 824E cycle ergometer.
5. The subject will receive method details in full. Due to the stressful nature of this test, the test will not be repeated. If a re-test is required, this will be held on a separate day.
6. The tester is available to answer any relevant queries which may arise concerning the test.
7. The subject is free to withdraw consent and discontinue participation in the test at any time.
8. Recorded data will be treated confidentially.

I fully understand the scope of my involvement in this test. I fully understand the arduous nature of this test and have freely consented to be a subject.

Subject signature: *Chris Kahlo*

Date: *07 January 2011*

Tester signature: *John Russell*

Date: *07 January 2011*

Parent/Guardian signature: *F Kahlo (Mrs)*

Date: *07 January 2011*

Ramsay College of FE

Skinfold Testing

Name: Chris Kahlo

Date: 14.01.2011

Gender: male

Age: 17 years

Skinfold site	Chest (mm)	Abdomen (mm)	Thigh (mm)
Trial 1	6.2	12	12.2
Trial 2	7	11	12
Average	6.6	11.5	12.1

Results using J-P calculations:

SSF = Sum of chest, abdomen and thigh (mm)

Body density (Bd) = $1.1093800 - (0.0008267 \times \text{SSF}) + (0.0000016 \times (\text{SSF}^2)) - (0.0002574 \times \text{age in years})$

$$\begin{aligned} \text{Bd} &= 1.1093800 - (0.0008267 \times 30.2) + (0.0000016 \times 912.04) - (0.0002574 \times 17) \\ &= 1.1093800 - (0.0249663) + (1.45926 \times 10^{-3}) - (4.3758 \times 10^{-3}) \\ &= 1.0844137 + 1.45926 \times 10^{-3} - 4.3758 \times 10^{-3} \\ &= 1.08 \end{aligned}$$

Calculation of percent body fat (Brozek, 1959):

$$\begin{aligned} \% \text{ body fat} &= [(4.57 / \text{Bd}) - 4.142] \times 100 = \% \text{ fat} \\ &= [(4.57 / 1.08) - 4.142] \times 100 = \% \text{ fat} \\ &= [0.089] \times 100 = 8.95 \% \text{ body fat} \end{aligned}$$

Notes: *The Jackson & Pollock skinfold method for males was used, which was chest, abdomen and thigh. Equipment – I used Harpenden skinfold calipers, a tape measure and a pen to mark the sites.*

Sample learner work: page 8

Learner name: John Russell

Ramsay College of FE

Individual Data for Handgrip Strength

Name: Chris Kahlo

Date: 14.01.2011

Gender: male

Age: 17 years

(kg)	Trial 1	Trial 2	Trial 3	Average
Right	43	40	44	42
Left	47	48	49	48
Right	44	45	44	44
Left	48	48	49	48
Right	44	44	45	44
Left	48	49	50	49

Results:

Best right hand = 45 kg

Best left hand = 50 kg

We used a manual handgrip dynamometer (takei Kiki Kogyo)

Sample learner work: page 9

Learner name: John Russell

Ramsay College of FE

35m Sprint Test Data Sheet

Name: Chris Kahlo

Date: 17.01.2011

Gender: male

Age: 17 years

Trial Number	Time (s)
1	5.20
2	5.10

The test was performed in the college sports hall. Chris had a 5-minute recovery period between trial 1 and trial 2.

OVERALL FITNESS TEST RESULTS FOR CHRIS KAHLO

Fitness component	Fitness test	Trial 1	Trial 2	Test result	Units	Interpretation of test results (Rating)
Flexibility	Sit-and-reach test	13	14	14	cm	Average
Aerobic endurance (VO₂ max)	Multi-stage fitness test	46.8	48	48	ml/kg/min	Good
Anaerobic power	Wingate test	694.1	-	694.1	W	Average
Body composition	Skinfold testing	8.95	-	8.95	% Body fat	Slim
Strength	Handgrip strength	44 (R) 48 (L)	44 (R) 49 (L)	45 (R) 50 (L)	kg	Average (R) Good (L)
Speed	35m sprint	5.2	5.1	5.1	s	Average

Sample learner work: page 10

Learner name: John Russell

Assignment references

Bar-Or O (1978); *A New Anaerobic Capacity Test: Characteristics and Applications*. Proceedings of the 21st World Congress in Sports Medicine. Brasilia.

Brozek J (1959); *Techniques for Measuring Body Composition*. Quartermaster Research Engineering Centre (AD<286506) Natick, Mass, p95.

Hueger WWK (1989); *Sit and Reach Test Tables*. Lifetime Physical Fitness and Wellness. Morton Publishing.

Inbar O, Bar-Or O (1986); *Anaerobic Characteristics in Male Children and Adolescents*. Medicine and Science in Sports and Exercise, 18 (3): 264–269.

Jackson AS, Pollock ML (1978); *Generalised Equations for Predicting Body Density of Men*. British Journal of Nutrition, 40, 497–504.

Leger LA, Lambert J (1982); *A Maximal Multistage 20m Shuttle Run Test to Predict VO_2 max*. European Journal of Applied Physiology, 49, 1–5.

Police Force Fitness Assessment Mark Sheet.

Sharkey B.J (1990); *Physiology of Fitness*. Human Kinetics, Champaign, Illinois.

The University of Loughborough, Department of Physical Education and Sports Science (1987); *Table of Predicted Maximum Oxygen Uptake Values for the Multistage Fitness Test*.

Observation record (by tutor)

Learner name	John Russell		
Qualification	BTEC Level 3 National in Sport BTEC Level 3 National in Sport and Exercise Sciences		
Unit number and title	Unit 7/8: Fitness Testing for Sport and Exercise		
Description of activity undertaken (please be as specific as possible)			
Six fitness tests were selected and administered for a chosen individual			
Task 2:			
<ul style="list-style-type: none"> • Verbal justification to the individual of why each fitness test was selected (M3). 			
Task 3:			
<ul style="list-style-type: none"> • Verbal feedback to the individual following each fitness test and interpretation of test results against normative data (P6). • Verbal identification of the individual's strengths and areas for improvement (M4). • Verbal analysis of the individual's fitness test results, providing recommendations for appropriate future activities or training (D2). 			
Assessment and grading criteria			
M3: Justify the selection of fitness tests, commenting on suitability, reliability, validity and practicality			
P6: Give feedback to a selected individual, following fitness testing, describing the test results and interpreting their levels of fitness against normative data			
M4: Compare the fitness test results to normative data and identify strengths and areas for improvement			
D2: Analyse the fitness test results and provide recommendations for appropriate future activities or training			
Have these assessment and grading criteria been achieved? – YES, criteria M3, P6, M4 and D2 have been met.			
How the activity meets the requirements of the assessment and grading criteria			
M3: At start of first fitness testing session (flexibility sit and reach test – 07.12.2010), learner provided verbal justification to the individual, discussing tests selected and why these had been chosen. Learner took into account the individual's age, sports ability and interests to select tests that would be suitable. This included selecting a physically stressful test (Wingate) because the individual stated he was a keen cyclist and wanted to work to his max. Learner discussed test validity and reliability issues for each test, covering aspects such as use of re-tests, ensuring an all-out effort and the importance of keeping in time with bleeps on the multi-stage fitness test. Test practicality was discussed, including disadvantages of maximal and sub-maximal tests and how this had affected test selection. Learner justified the greater usefulness of sport-specific tests selected (ie running – multi-stage fitness test and cycling – Wingate test), because these would better reflect the physiological demands of the individual's sport and specific working muscles. M3 – MET			
P6: Six fitness tests were administered to the selected individual between 07.12.2010 and 17.01.2011. Following each test, the learner used published data tables to interpret the individual's test results and comprehensive feedback was provided regarding their fitness levels. All results were recorded accurately using data collection sheets. P6 – MET.			
M4: Learner compared each test result to published data tables according to the individual's age, gender and ethnic origin and verbally identified the strengths and areas for improvement. M4 – MET.			
D2: After completing the final fitness test (35m sprint test – 17.01.2011), learner provided an overall verbal analysis of the six test results and recommended appropriate future activities and training methods. This included use of hill sprints, hollow sprints and fartlek training to develop speed. Interval training for developing aerobic fitness and plyometric circuits, which learner stated could be tailored to be sport-specific. PNF stretching discussed, although individual was not interested in incorporating this into his training regime. D2 – MET.			
Learner signature	John Russell	Date	17 January 2011
Assessor signature	Clara Wells	Date	17 January 2011
Assessor name	Mrs C Wells		

Witness statement (by tutor)

Learner name	John Russell
Qualification	BTEC Level 3 National in Sport BTEC Level 3 National in Sport and Exercise Sciences
Unit number and title	Unit 7/8: Fitness Testing for Sport and Exercise

Description of activity undertaken (please be as specific as possible)

- Selection of six different fitness tests for an individual
- Safe administration of each test

Assessment and grading criteria

P5: Select and safely administer six different fitness tests for a selected individual recording the findings

Evidence is sufficient to support achievement of assessment criterion P5.

How the activity meets the requirements of the assessment and grading criteria, including how and where the activity took place

Six different fitness tests administered to selected individual (C Kahlo). These were: Sit and reach test (07.12.2010); multi-stage fitness test (10.12.2010); anaerobic Wingate test (12.01.2011); skinfold testing (14.01.2011); handgrip dynamometer (14.01.2011); 35 m sprint test (17.01.2011).

Tests were administered either in the College sports hall, gym or classroom. Learner took the individual's age, general sports ability and personal needs into account when selecting suitable tests. Correct test methodology was adhered to closely throughout. Pre-test procedures were followed. The individual to be tested was fully briefed on test protocols. Learner was aware of reasons for test termination, and was watchful of this, particularly for the more physically stressful test administered (Wingate) and informed consent obtained. Health, safety and welfare of the subject considered throughout.

Witness name	N/A	Job role	N/A
Witness signature	N/A	Date	N/A
Learner name	John Russell		
Learner signature	John Russell	Date	17 January 2011
Assessor name	Mrs C Wells		
Assessor signature	Clara Wells	Date	17 January 2011

Sample assessor's comments

Qualification	BTEC Level 3 National in Sport/ Sport and Exercise Sciences	Year	2010–11
Unit number and title	7/8: Fitness Testing for Sport and Exercise – Assignment 3	Learner name	John Russell

Grading criteria	Achieved?
P5 Select and safely administer six different fitness tests for a selected individual recording the findings	Y
M3 Justify the selection of fitness tests commenting on suitability, reliability, validity and practicality	Y
P6 Give feedback to a selected individual following fitness testing, describing the test results and interpreting their levels of fitness against normative data	Y
M4 Compare the fitness test results to normative data and identify strengths and areas for improvement	Y
D2 Analyse the fitness test results and provide recommendations for appropriate future activities or training	Y

Learner feedback

I enjoyed this assignment because it gave me the opportunity to use fitness testing skills I picked up on the First Diploma in Sport, and this time administer tests for another individual. I also thought it was good that it was basically all practical work, because I don't like writing reports much, it can be a bit boring. Chris enjoyed finding out what his fitness levels were like and how these could be improved.

Assessor feedback

This is an excellent piece of work John. You have performed extremely well throughout, showing your professional, mature and confident manner. You adhered closely to standard test protocols, ensuring the health, safety and welfare of your subject throughout. Witness statement and observation record provided to confirm achievement of practically based assessment and grading criteria. Very well done.

Action plan

It's good practice to include references in text where appropriate (as well as in your overall references section). For future assignments, you could use several data interpretation tables for each test (they do vary!), to build up a wider picture of the fitness testing results obtained.

Assessor signature	Clara Wells	Date	10 February 2011
Learner signature	John Russell	Date	15 February 2011

Sample internal verification of assessment decisions

Qualification	BTEC Level 3 National in Sport/Sport and Exercise Sciences		
Assessor	Mrs C Wells		
Unit(s)	7/8: Fitness Testing for Sport and Exercise		
Assignment title	Fitness Testing – Assignment 3		
Learner's name	John Russell		
Which criteria has the assessor awarded?	Pass P5, P6	Merit M3, M4	Distinction D2
Do the criteria awarded match those targeted by the assignment brief?	Yes The assignment tasks clearly indicate how the criteria can be met.		
Has the work been assessed accurately?	Yes The assessor has accurately assessed the learner's work and criteria P5, P6, M3, M4 and D2 have been met. Assessment decisions are valid.		
Is the feedback to the learner: Constructive? Linked to relevant grading criteria? Identifying opportunities for improved performance?	Yes The feedback is constructive and relevant to the criteria. No opportunities for improvement were required as it was a distinction-level piece of work.		
Does the grading decision need amending?	No Assessment decisions are valid.		
Remedial action taken	None required		
Internal verifier name	Mr I Worrell		
Internal verifier signature	<i>Ian Worrell</i>	Date	<i>14 February 2011</i>
Confirm action completed	N/A	Date	N/A
Assessor name	Mrs C Wells	Date	<i>14 February 2011</i>
Assessor signature	<i>Clara Wells</i>	Date	<i>14 February 2011</i>