



Business & Computing Examinations (BCE)

LONDON (UK)

BCE Centre Learning Resources and Learning Environment

Commitment to providing a well-resourced and positive learning environment for learners.

BCE Approved Centres should conduct regular reviews on the quality of their learning environment. In parallel, through the learner welfare service, centres should aim to be responsive to any issues expressed by learners about the quality of learning environment.

Responsibility: Centres should ensure that learning environment and learning resources meet the needs of learners.

Centre buildings should meet all relevant health and safety legislation.

Effective ways of displaying information

Centres should ensure the relevant information is displayed effectively all around the building and classrooms. Timetables, examination dates, qualification syllabi, health and safety information clearly presented around classrooms, in reception area as well as on online platform.

Learning Resources

BCE promotes the establishment of a resource-rich learning environment through the evaluation of educationally appropriate BCE Learner Study Manuals and recommended textbooks intended for use by tutors and learners. Centres can buy BCE Learner Study Manuals or recommended textbooks and design media formats including, but are not limited to, powerpoint slides, videos, and software, as well as combinations of these formats. Resources that support our curricula are identified through an evaluation process that is carried out by practicing centres and learners.

The use of learning resources involves the tutor as a facilitator of learning. However, learners may be expected to have some choice in materials for specific purposes such as independent reading or research. Tutors are expected to use a variety of resources to support learning outcomes at any particular level. A multimedia approach is encouraged (power point slides) and study manuals. However, we do support special needs audience in the evaluation and annotation of learning resources, for example, Word special-format versions of selected resources (Braille and taped-book formats) can be arranged for a fee.

Recommended Learning Resources

All BCE qualifications have Learner Study Manuals which centres can buy at a reasonable fee. Each BCE unit syllabus/specification identifies the recommended textbooks.

1. Centre Learning Programme

The development of this Learning Programme has been guided by the principles of learning.

These are:

- Learning requires the active participation of the learner.
- People learn in a variety of ways and at different rates.
- Learning is both an individual and a group process.

The intended learning outcomes and assessment criteria set the learning standards for the Level 3 and 4 Certificate, Level 5 Diploma and Level 6 Diploma qualifications and form the prescribed curriculum for BCE. They are statements of what learners are expected to know and do at the end of an indicated level.

Centres have the responsibility to ensure that all learning outcomes in each level are met; however, tutors have flexibility in determining how delivery of the learning outcomes can best take place. It is expected that learner achievement will vary in relation to the learning outcomes. Evaluation, reporting, and learner placement with respect to these outcomes are dependent on the professional judgment and experience of tutors, guided by the Centre Head/Principal.

1.1 Planning a Learning Programme

This section contains a planning guide and suggestions on how to integrate our qualifications into a classroom setting.

Achieving Successful Implementation

BCE can assist in the successful implementation of the learning programmes by:

- supporting and encouraging Centre tutors to identify their individual strengths, needs, and interests in the use of Recommended Learning Resources.
- developing Centre goals that can be used as a framework to direct technology acquisition and implementation, and tutor in-service models.
- developing and communicating strategies to support Centre tutors before and during implementation of the qualifications.
- promoting a climate for Centre tutors to explore a variety of approaches and teaching strategies to incorporate essential computer and management technology skills.

The Role of the Tutor

When planning for the implementation of the learning, tutors should ensure that all learning outcomes are met. This includes a suggested checklist for designing a lesson (or series of lessons). A suggested lesson-design template is provided. This lesson-design template will help tutors to:

- ensure that learning outcomes from each of the curriculum units are addressed
- provide learners with opportunities to explore and feel comfortable with a range of tools (e.g. computer peripherals) and processes (e.g., constructing flow charts, writing documentation)
- set developmental objectives appropriate to learner needs
- plan learning activities that provide for individual and group work
- acknowledge and plan for a range of learner learning styles
- include activities and strategies relevant to learners

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Lesson Design	
Step 1.	Select curriculum learning outcomes. Identify learning outcomes and concepts to use in a curriculum.
Step 2.	Determine specific instructional objectives. Tutors may want to identify additional criteria for what learners should demonstrate at the end of the lesson .
Step 3.	Identify available facilities, software, hardware, and equipment. <input type="checkbox"/> Internet Access <input type="checkbox"/> E-mail Access <input type="checkbox"/> Newsgroups <input type="checkbox"/> Desktop Publishers <input type="checkbox"/> Desktop Imaging <input type="checkbox"/> Digital Video <input type="checkbox"/> Video/Audio <input type="checkbox"/> Video Camera <input type="checkbox"/> Software <input type="checkbox"/> Facility Arrangement <input type="checkbox"/> Video Conferencing <input type="checkbox"/> Class Location
Step 4.	Identify available learning resources. <ul style="list-style-type: none"> ▪ Preview recommended software. ▪ Identify resources available in the Centre. ▪ Select resources that enable integration of multiple learning outcomes. ▪ Explore the World Wide Web to find resources in the content area.
Step 5.	Develop appropriate instructional strategies. Develop a variety of learning activities that encourage the use of computing tools and processes to explore learning outcomes.
Step 6.	Set criteria for assessing learning outcomes. Identify criteria and establish the standard of achievement for learner learning. Provide opportunities for learners to demonstrate their learning.
Step 7.	Extend learning. Develop activities to extend learning, and check for learners' understanding through demonstrating, inquiring, and explaining.
Step 8.	Design review questions/activities. Develop questions or activities for learners
Step 9.	Give learners feedback. Mark learner work and review all questions/activities
Step 10	Keep a record of learner work. Administration to record all learner work marked. Just like learners, tutors to give lesson review points on intended learning outcomes based on each learner performance. This information helps learners follow class progress. All points are based on total of 10.

Lesson-Design Template	
Course: _____	
Subject Title: _____	
Topic: _____	
Step 1.	Select curriculum learning outcomes. _____ _____
Step 2.	Determine specific instructional objectives. _____ _____
Step 3.	Identify available facilities, software, hardware, and equipment. _____ _____
Step 4.	Identify available learning resources. _____ _____
Step 5.	Develop appropriate instructional strategies. _____ _____
Step 6.	Set criteria for assessing learning outcomes. _____ _____
Step 7.	Extend learning. _____ _____
Step 8.	Design review questions/activities. _____ _____
Step 9.	Give learners feedback. _____ _____
Step 10.	Keep a record of learner work. _____ _____

Intended Learning Outcome Lecture Points Record

Qualification Title and Code:				Unit Title:										Exam Paper No.:		
Learner Name	Learning Outcomes														Comment	
	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	LO11	LO12	LO13	LO14		

Lecturer Points: between 8 & 10 Excellent; between 5 & 7 Good; between 3 & 4 Not Good; between 2 & 0 Dreadful

Tutor/Internal Moderator :

Signature:

Date:

2. **Internal Assessment Strategies**

The Learning Assessment Programme

Centre Learning Assessment Programmes should gather information on learners' performance throughout the qualification duration. Results from these assessments should then be used in the development and revision of curricula and provide information about teaching and learning. Where appropriate, knowledge gained from these assessments will influence the assessment strategies in future suggestions. Assessment method refers to the various strategies and techniques that teachers might use to acquire assessment information. These strategies and techniques include: observation, curriculum-embedded questions and tests, oral questioning, benchmarks, self-assessments, performance assessments, writing samples and portfolio/ project assessment.

Assessment in General

Assessment is the systematic process of gathering information about learners' learning in order to describe what they know, are able to do, and are working toward. From the evidence and information collected in class assessments, tutors describe each learner's learning and performance. They should use this information to provide learners with ongoing feedback, plan further instructional and learning activities, set subsequent learning goals, and determine areas requiring diagnostic teaching and intervention. Tutors should base their evaluation of a learner's performance on the information collected through class assessment. They should use their insight, knowledge about learning, and experience with learners, along with the specific criteria they establish, to make judgments about learner performance.

Tutors determine: the purpose, aspects, or attributes of learning on which to focus the assessment; when to collect the evidence; and the assessment methods, tools, or techniques most appropriate to use. Class assessment should focus on the critical or significant aspects of the learning to be demonstrated by the learner. Learners benefit when they clearly understand the learning goals and learning expectations.

The class assessment of learner performance is based on a wide variety of methods and tools, ranging from portfolio assessment to pencil-and-paper tests.

Learning outcomes, expressed in measurable terms, provide the basis for the development of learning activities and assessment and evaluation strategies.

Assessment and Evaluation

Class assessment methods and tools should include: *observation, learner self-assessments, daily practice assignments, quizzes, samples of learner work, tests, holistic rating scales, projects, oral and written reports, performance reviews, portfolio/coursework and final examination assessments.*

Learner performance should be evaluated from the information collected through assessment activities. Tutors should use their insight, knowledge about learning, and experience with

learners, along with the specific criteria they establish, to make judgments about learner performance in relation to learning outcomes.

Learners benefit most when evaluation is provided on a regular, ongoing basis. When evaluation is seen as an opportunity to promote learning rather than as a final judgment, it shows learners their strengths and suggests how they can develop further. Learners can use this information to redirect efforts, make plans, and establish future learning goals.

Evaluation may take different forms, depending on the purpose.

Criterion-referenced evaluation is used to evaluate learner performance in classrooms. It is referenced to criteria based on learning outcomes described in the curriculum. The criteria reflect a learner's performance based on specific learning activities.

In criterion-referenced evaluation, a learner's performance is compared to established criteria rather than to the performance of other learners. Evaluation referenced to curriculum requires that criteria are established based on the intended learning outcomes listed under the assessment criteria.

Criteria are the basis of evaluating learner progress; they identify the critical aspects of a performance or a product that describe in specific terms what is involved in meeting the learning outcomes. Criteria is used to evaluate our learner performance in relation to learning outcomes. For example, weighting criteria, using rating scales, or performance rubrics (reference sets) are ways that learner performance are evaluated using criteria.

Samples of learner performance reflect learning outcomes and identified criteria. The samples clarify and make explicit the link between evaluation and learning outcomes, criteria, and assessment.

Centre Criterion-referenced evaluation should be based on these steps:

1. Identify the learning outcomes.
2. Identify the key objectives for instruction and learning.
3. Establish and set criteria. Involve learners, where appropriate, in establishing criteria.
4. Plan learning activities that will help learners gain the knowledge or skills outlined in the criteria.
5. Prior to the learning activity, inform learners of the criteria against which their work will be evaluated.
6. Provide examples of the desired levels of performance.
7. Implement the learning activities.
8. Use various assessment methods based on the particular assignment and learner.
9. Review the assessment data and evaluate each learner's level of performance or

quality of work in relation to criteria.

10. Where appropriate or necessary, assign a letter grade that indicates how well the criteria are met.
11. Report the results of the evaluations to learners and administration.

Selecting Learning Resources for the Classroom

Selecting a learning resource means choosing appropriate materials from the list of recommended resources or other lists of evaluated resources. The process of selection involves many of the same considerations as the process of evaluation, though not to the same level of detail. *Content, instructional design, technical design, and social considerations* are included in the decision-making process, along with a number of other criteria.

The selection of learning resources is an ongoing process to ensure a constant flow of new materials into the classroom.

Criteria for Selection

There are a number of factors to consider when selecting learning resources.

Content

The foremost consideration for selection is the curriculum to be taught. Prospective resources must adequately support the particular learning objectives that the tutor wants to address. It is the responsibility of the tutor to determine whether a resource will effectively support any given learning outcomes within a curriculum level. This can only be done by examining descriptive information regarding that resource; acquiring additional information about the material from the supplier, published reviews, or colleagues; and by examining the resource first-hand.

Instructional Design

When selecting learning resources, tutors must keep in mind the individual learning styles and abilities of their learners, as well as anticipate the learners they may have in the future. Resources support a variety of special audiences, including gifted, learning disabled, mildly intellectually disabled, and English as a second language learners. The instructional design of a resource includes the organisation and presentation techniques; the methods used to introduce, develop, and summarize concepts; and the vocabulary level. The suitability of all of these should be considered for the intended audience.

Technology Considerations

Tutors are encouraged to embrace a variety of educational technologies in their classrooms. To do so, they will need to ensure the availability of the necessary equipment and familiarise themselves with its operation. If the equipment is not currently available, then the need must be incorporated into Centre technology plan.

Social Considerations

All BCE recommended resources list have been thoroughly screened for social concerns from an administrative perspective. However, centres and tutors must consider the appropriateness of any resource from the perspective of the class audience.

Media

When selecting resources, tutors should consider the advantages of various media. Some topics may be best taught using a specific medium. For example, video may be the most appropriate medium when teaching a particular, observable skill, since it provides a visual model that can be played over and over or viewed in slow motion for detailed analysis. Video can also bring otherwise unavailable experiences into the classroom and reveal "unseen worlds" to learners. Software may be particularly useful when learners are expected to develop critical-thinking skills through the manipulation of a simulation, or where safety or repetition are factors. Printed resources or CD-ROM can best be used to provide extensive background information on a given topic. Once again, tutors must consider the needs of their individual learners, some of whom may learn better from the use of one medium than another.

3. Assessment and Evaluation

This section contains assistance for tutors on evaluation and reporting. Curriculum outcomes are used as the source for criterion-referenced evaluations.

It shows how a tutor links criteria to learning outcomes. The criteria is based on learning outcomes taken from each topic. The criteria provide background information to explain the classroom context; suggested instruction tasks and strategies; the tools and methods used to gather assessment information; and the criteria used to evaluate learner performance.

3.1 How the criteria are organised

There are four parts to each criteria:

- identification of the learning outcomes
- planning for assessment and evaluation
- defining the criteria
- assessing and evaluating learner performance

Learning Outcomes

Identifies the topic

Planning for Assessment and Evaluation

Outlines:

- background information to explain the classroom context
- instructional tasks

- the opportunities that learners are given to practise learning
- the feedback and support that is offered learners by the tutor
- the ways in which the tutor prepare learners for the assessment

Defining the Criteria

Illustrates the specific criteria (based on learning outcomes), the assessment task, and various reference sets.

Assessing and Evaluating Learner Performance

Includes:

- assessment tasks or activities
- the support that the tutor offer learners
- tools and methods used to gather the assessment information
- the way the criteria were used to evaluate the learner performance

1. Thinking critically and making judgments

(Developing arguments, reflecting, evaluating, assessing, judging)

Essay / Report

2. Solving problems and developing plans

(Identifying problems, posing problems, defining problems, analysing data, reviewing, designing experiments, planning, applying information)

Group Work

3. Performing procedures and demonstrating techniques

(Computation, taking readings, using equipment, following laboratory procedures, following protocols, carrying out instructions)

Demonstration / Laboratory work

4. Managing and developing oneself

(Working co-operatively, working independently, learning independently, being self-directed, managing time, managing tasks, organising)

BCE Cross-Reference Manuals (Encouraging Breadth of Study)

5. Accessing and managing information

(Researching, investigating, interpreting, organising information, reviewing and paraphrasing information, collecting data, searching and managing information sources, observing and interpreting)

Coursework/Project /Cross Reference Reading

6. *Demonstrating knowledge and understanding*

(Recalling, describing, reporting, recounting, recognising, identifying, relating & interrelating)

Class assignments / Answering essay questions / Multiple Choice Questions /Designing end of chapter questions

7. *Designing, creating, performing*

(Imagining, visualising, designing, producing, creating, innovating, performing)

Presentations/Coursework

8. *Communicating*

(One and two-way communication; communication within a group, verbal, written and non-verbal communication. Arguing, describing, advocating, interviewing, negotiating, presenting; using specific written forms)

Written presentation (essay, report)

3.2 **Teaching and Assessment Methods**

Teaching and assessment methods vary depending on unit(s)/subject(s). Teaching activities include:

Case studies – this is where learners get to look at how real-life events have an impact on what they are studying, for example, Law learners could look at real legal cases, while marketing learners could study strategies used by a famous company to get people to buy their products.

Group work – two heads are better than one, an opportunity to work with fellow learners on a piece of work or project. Learners work together, sharing ideas and knowledge, which may involve giving presentation on findings.

Lectures – a chance to benefit from the expertise of those who know. A lot of information can pass from the lecturer/tutor to learners and the notes taken will be invaluable for class assignments, coursework and final examinations.

Practical fieldwork – an opportunity to escape from the lecture theatre or laboratory and maybe even get their hands dirty. This is where learners will pick up the practical skills that go alongside the theory.

Seminars/tutorials – where learners can get together in smaller groups to look in more depth at the issues raised in lectures. Each learner can add their own thoughts and opinions which can often lead to a debate. Tutorials are normally on a smaller scale than seminars which often include oral presentations. Learners get experience of presenting a topic – a highly valued skill by today’s employers.

Work placements – the chance to gain some crucial, hands-on experience of the working world, which could involve a few weeks to a full year in industry.

3.3 BCE Assessment Evaluation Methods

BCE assessment evaluation methods involve written examinations and project/coursework.

Examinations – test the ability to work and cope under pressure. BCE examinations are normally held in April, August and December. Centres should implement a reasonable revision period to give learners a chance for in-depth personal study and preparation for exams.

Reports/essays – written ways of relating the understanding of a particular subject. This could involve critically evaluating a question and coming up with an answer with evidence to back up the conclusions.

Project/Coursework – involves working on a problem in-depth individually to answer to a set problem. Coursework involves an in-depth critical study of a unit/subject and compilation of an extensive report; it forms a major part of the qualification assessment.

Considerations Prior to Lesson Instruction

There are several educational, social, and technical issues that tutors should consider before starting a lesson programme. Thinking through the following issues will help tutors to get programs off to a good start.

Integration

Learning can be more meaningful when tutors and learners collaborate.

Awareness

Units like Information Technology, Business English or Accounting are a part of our daily lives. Today's learners require these skills to participate in society. The importance of Information Technology, Business English and Accounting are evident in all curricular areas. Tutors should be aware of these tools and their effect on their lives, their learners' lives, and on society in general.

Personal Skills and Interests

Tutors should do a personal inventory of their skills. In doing so, they will be able to identify their strengths and weaknesses.

Tutors should be aware that self-improvement and professional development must occur on a continuing basis. The rapid rate of changes in today's world makes it especially important for tutors to keep updating their skills in all areas.

Awareness of Equipment, Software, Concepts, and Skills

Since computing is integrated with other subject areas, tutors need to assess the resources available. Are computers configured as stand-alones or is there a networked lab? What software is available to learners and tutors? Does the Centre have specialised equipment that learners can use (e.g., digital camera, scanner, printers)?

It is also essential for tutors to have an awareness of the technological capabilities available in the Centre. In many cases, information technology tools and resources work together to produce results, so that a weakness in one link of the chain may not affect the entire process. For example, computers with insufficient memory may not allow a certain software package to function correctly; as a result, the software package may not be suitable for purchase by the Centre. Likewise, the tutor does not need to be a keyboarding expert but may need to be aware of research on learning proper keyboarding skills.