



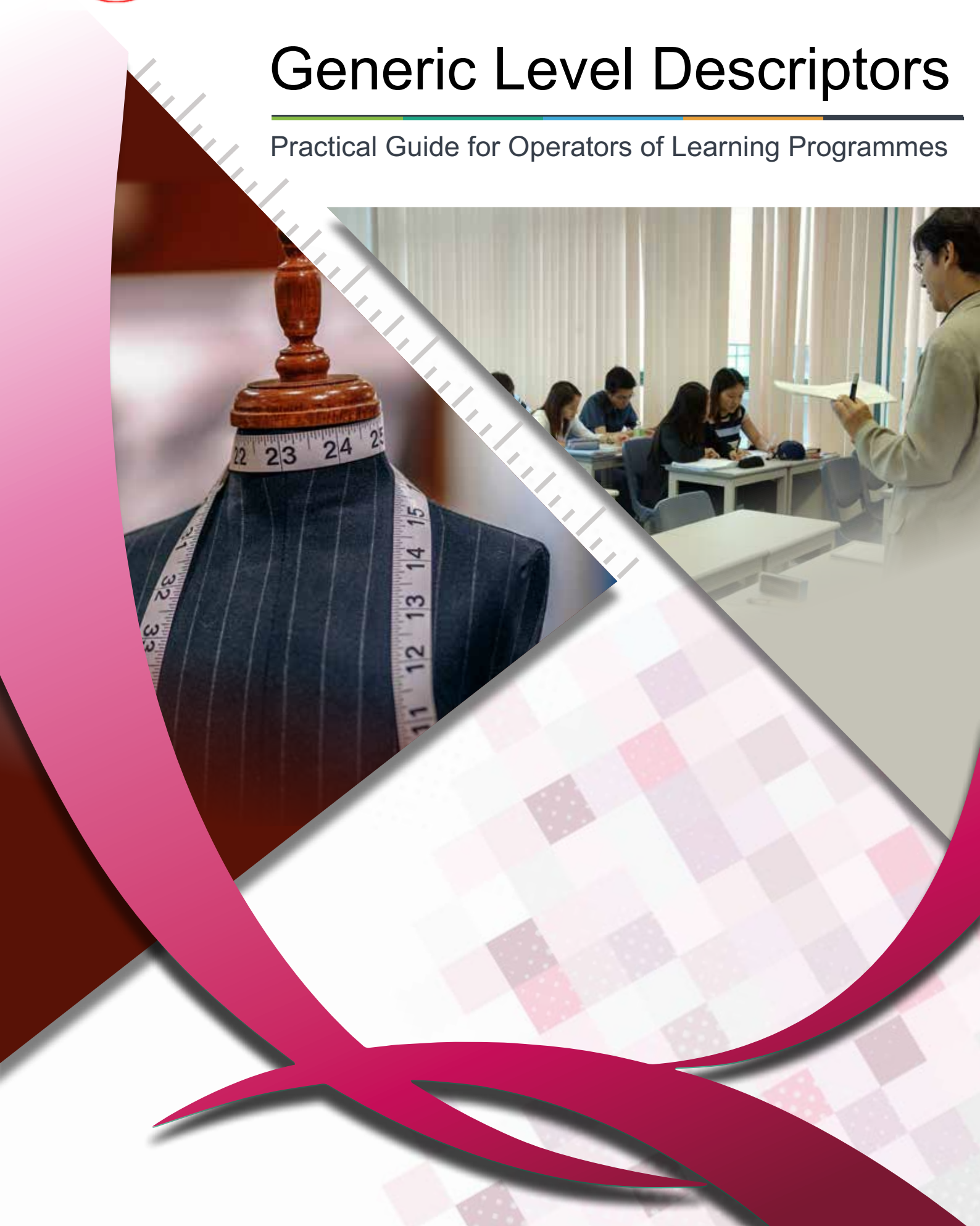
教育局
Education Bureau



資歷架構
Qualifications
Framework

Generic Level Descriptors

Practical Guide for Operators of Learning Programmes



About this Guide

Under the Hong Kong Qualifications Framework (HKQF), each qualification is assigned a QF level to indicate its position in the hierarchy relative to others based on the complexity of learning contained in the qualification. The QF level of a qualification is determined in accordance with the Generic Level Descriptors (GLD). This Guide is one of the practical tools to help operators of learning programmes use and apply the GLD under the HKQF.

This Guide is for general reference only and should be read together with the GLD, which can be found on the website of the HKQF at www.hkqf.gov.hk.

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Part 1 GLD in brief

The Generic Level Descriptors (GLD) specify, in four domains, the outcome standards expected of qualifications at each level of the HKQF. These outcome standards are attainable through different forms of learning. Learning may be formal (via a course of study in a learning programme), informal (by experience) and / or non-formal (via structured learning environments without a formal curriculum, e.g. conference attendance) in various modes and may lead to academic, vocational and professional qualifications.

Each descriptor in the GLD starts with an action verb(s). Together with the corresponding contextual information and specified manner, the descriptors provide an indication of the expected level of knowledge and skills assessable and attainable at the relevant QF level.

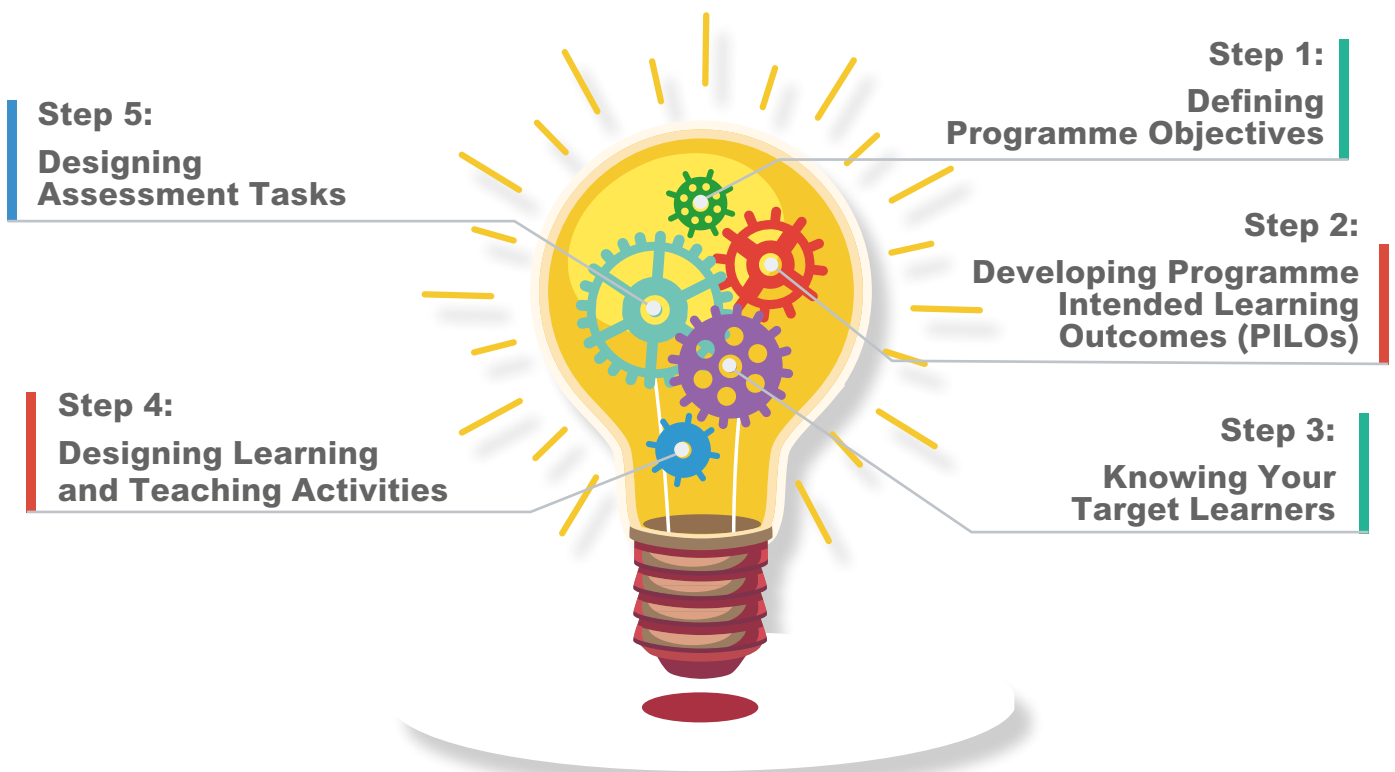
The descriptors progress in a linear manner from the simplest at level 1 to the most advanced at level 7. They are hierarchical, with those at lower levels subsumed under higher levels. Horizontally, the descriptors are inter-related across the four domains at the same QF level. To have a holistic understanding, the descriptors in each domain of the same QF level should be read together. For example, at QF level 1, the learner uses basic knowledge and memory recall (Knowledge and Intellectual Skills domain) to execute routine and repetitive tasks, by applying learnt responses (Processes domain) under close supervision (Autonomy and Accountability domain).



- The GLD are not an exact science. You must exercise judgement in interpreting and applying the GLD to the discipline, profession or sector in context.
- The descriptors in the GLD at various QF levels are hierarchical, with those at lower levels subsumed under higher levels.
- To have a holistic understanding, the descriptors in each domain of the GLD at the same QF level should be read together.
- In some circumstances, you may need to apply the GLD in conjunction with the Award Titles Scheme, Guidelines for the use of QF Credit, Common Descriptors on Associate Degree and Higher Diploma, Specification of Competency Standards, Specification of Generic (Foundation) Competencies, Qualifications Guidelines for SCS-based and SGC-based Courses, and other relevant documents.

Part 2 Concept of outcome-based teaching and learning

As stated in the previous section, the GLD specify the outcome standards expected of qualifications at each level of the HKQF. Therefore, learning programmes that meet the QF standards must also be outcome-based. There are five interconnected steps in the design of outcome-based learning programmes leading to qualifications at a relevant QF level. We will go through each of these steps one by one. At the end of the process, you will be able to assign a QF level to a qualification with well-grounded justifications.



Tips

- All steps are applicable to design both academic and vocational & professional outcome-based learning programmes and respective qualifications.
- Reference has been made to the outcome-based approaches in student learning adopted by the self-accrediting operators and the accreditation guidelines and guidance notes of the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) (www.hkcaavq.edu.hk).

Step 1: Defining Programme Objectives



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When designing a learning programme, the starting point is to define the programme objectives, which are usually **broad statements about what the programme will generally cover** and the expectations of what **successful learners will achieve within the scope of the programme**.

An example of programme objectives of an undergraduate programme operated by the Department of Civil Engineering of an institution

This programme aims to prepare students who are all-rounded, broad-based with global outlook, and knowledgeable with technical and professional competency in civil engineering.

Graduates are expected to:

- develop or design safe, sustainable, economical and environmentally sound solutions for civil engineering problems in a wide array of technical specialties such as construction, environmental, geotechnical, structural, transportation and water resources;
- master technical, management, oral and written communication and ICT skills to establish a professional career in the longer term;
- address the diverse needs of the profession by providing service ethically; and
- accept responsibilities as professionals starting a career in the field of civil engineering locally and globally.

These programme objectives serve as the foundation for developing the Programme Intended Learning Outcomes (PILOs). In the context of vocational and professional education and training, programme objectives are often expressed as fulfilling the needs and requirements of the professions or industries so as to prepare learners for immediate employment after graduation.



Tips

- Programme objectives are broad statements about **what the programme will generally cover** and the expectations of what **successful learners will achieve within the scope of the programme**.

Step 2: Developing Programme Intended Learning Outcomes (PILOs)



**Step 2:
Developing Programme
Intended Learning
Outcomes (PILOs)**

Outcome-based teaching and learning starts with clearly stating what learners are able to do at a given level of competency in a certain situation as a result of learning: the Intended Learning Outcomes (ILOs).

Let's look at the following PILOs from three different learning programmes.
Can you see any pattern?

- Critically evaluate the key issues and trends faced by the sports industry
- Carry out routine lines of enquiry with some discretion to support the decision making of the leisure managers
- Use different customer service techniques in handling routine clubhouse related requests

As you can see from the above examples, PILOs are expressed from the perspective of learners, i.e. what they can do on satisfactory completion of the learning programme. Each PILO starts with an action verb, followed by the activities, tasks and processes to be undertaken in context and the outcome requirements / standards to demonstrate attainment. The GLD serve as a useful reference for developing the PILOs.

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The following figure highlights some key characteristics of the GLD and examples of expression(s) of the GLD by level for developing PILOs.

Some key characteristics of the GLD	QF Level	Examples of expression(s) of the GLD
Create new or original work	7	Conceptualize
Critically evaluate new information, concepts and evidence from a range of sources and develop creative responses to routine and abstract professional problems and issues	6	Critically review, consolidate and extend knowledge, skills, practices and thinking
Formulate evidence-based responses	5	Analyse
Some discretion and creativity; Carry out routine lines of enquiry to address professional level issues and problems	4	Supervise
Make generalizations and predictions in familiar contexts	3	Access, organize and evaluate information independently and draw reasoned conclusions; Adapt
Solve problems by using rehearsed stages	2	Co-ordinate with others
Recall learnt responses	1	Receive and pass on; interact with others

When developing PILOs, please consider the following:

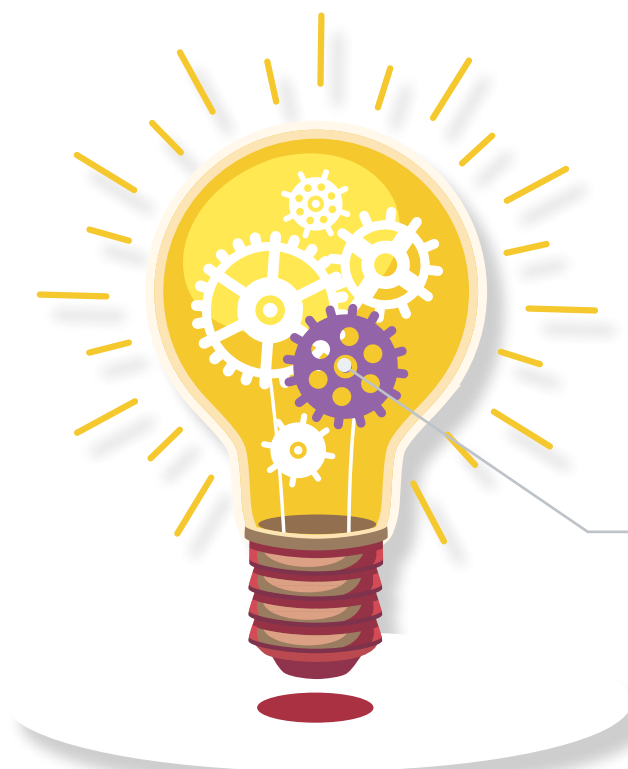
- Are the PILOs written from the perspective of learners?
- Are the PILOs clearly defined so that learners know exactly what they are able to do as a result of learning?
- Do the PILOs reflect the stated programme objectives?



Tips

- If the learning programme is designed using Unit(s) of Competency (UoC) in relevant Specification of Competency Standards (SCS), the PILOs should meet the integrated outcome requirement(s) of the selected Unit(s) of Competency in totality.
- A learning programme may be broken down into modules. A module (or a course or a subject) is the smallest identifiable part of a learning programme defined by a syllabus, including objectives, pre-requisites (if necessary), learning and teaching activities, and assessment methods. The intended learning outcomes of a module (or modules) (MILOs) are building blocks for learners to achieve the PILOs at the claimed QF level.

Step 3: Knowing Your Target Learners



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Imagine you were asked to make a presentation on the key issues and trends faced by the sports industry, the very first thing you would ask might be: who am I speaking to? That's because you need to know your target audience in order to structure your presentation.

For example, if your target audience is a group of experienced practitioners in the sports industry, you might not provide extensive background in your introduction. If, however, your target audience knows very little about the sports industry, you probably would set the scene e.g. with charts, figures, and videos to inform your audience.

The same is true when designing a learning programme. You need to know and understand your target learners. Imagine there are two learning programmes with the same PILO: 'use different customer service techniques in handling routine clubhouse related requests'. However, one learning programme has a longer study duration than the other. Why? The learning programme that has a longer study duration aims to train learners without any prior knowledge, skills or experience while the other targets practitioners of the related industry. Learners of the former programme typically require more foundation knowledge and hands-on skills via practice sessions so that they can gradually pick up various customer service techniques. This example highlights the fact that if you know your target learners well, it is more likely that you will be able to design learning and teaching activities with relevant content that address their learning needs to enable them to have a fair chance to attain the PILOs at the claimed QF level. In the next step, we will talk about the design of learning and teaching activities with relevant content.

Step 4: Designing Learning and Teaching Activities



Step 4: Designing Learning and Teaching Activities

When designing a learning and teaching activity with relevant content, we need to think whether the activity will enable learners to achieve the ILOs at the claimed QF level. For example, if one of the ILOs for a Property Management programme is to 'be able to handle routine enquiries from residents,' at QF level 2, a possible learning and teaching activity is role play in a simulated working environment so that the learners develop the competency to solve problems using rehearsed stages (Processes domain at QF level 2). Role play creates a situation where learners can work in pairs and experience different roles. They can take turns to practise and learn how to respond to the routine enquiries from residents such as what to do in the case of a faulty lift, by choosing and applying appropriate procedures set in rehearsed stages.



Tips

The learning and teaching activities with relevant content must be effective in delivering the PILOs at the claimed QF level.

Step 5: Designing Assessment Tasks

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We have now come to the last step. It's about designing appropriate assessment tasks that measure the ILOs at the claimed QF level.

For example, if one of the MILOs for a software programming course in an undergraduate programme is to 'be able to design web-enabled software using Java and critically evaluate the effectiveness of the deliverable with evidence' at QF level 5, the assessment task should align with the MILO at QF level 5. When designing an assessment task, we need to consider both validity and reliability.

Validity

The assessment measures what it intends to measure.

For example, a mark (or a grade) based on a learner's recall of knowledge is not a valid measure of the learner's knowledge application.

Reliability

The extent to which assessments are consistent.

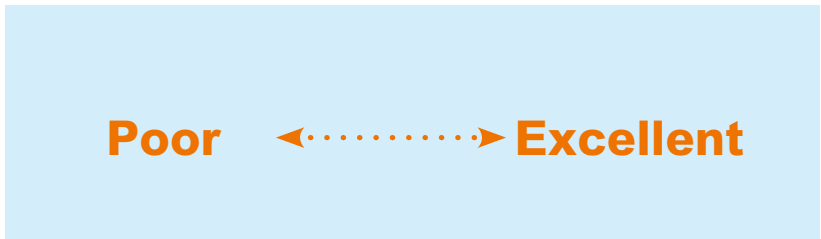
For example, different assessors using the same assessment task should arrive at the same conclusion about a learner's competency attainment.

A valid assessment task for the above MILO could be a project requiring learners to design web-enabled software using Java befitting the needs of the target client, with a self-evaluative project report outlining the rationales for the design, the pros and cons of the delivered software and observations for potential enhancement (Processes domain at QF level 5).

If an ILO is directly linked to the performance requirements of a particular job function required by an industry or a sector, it would be helpful if the assessment task replicates real world conditions as far as practicable.

To ensure that two different assessors arrive at the same conclusion about a learner's learning using the same assessment task, we can use rubrics to define the assessment criteria. Rubrics make explicit to learners the criteria against which their performance will be assessed. They can also provide diagnostic feedback to both learners and teachers/instructors on learners' learning, and ensure consistency among assessors. In brief, a rubric is a table showing quality of performance (or grades or achievement levels) on the horizontal axis, and dimensions of performance on the vertical axis. Please refer to the sample assessment rubric for the above assessment task on the next page as an example.

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Integrated Java programming skills to meet client's needs

1. The learner will deliver a web-enabled software using the Java programming language to meet the needs of the target client.

- failure to deliver the software. Or the software is completely irrelevant to client's need.
- The software efficiently and effectively delivers the required performance addressing fully the client's needs.

Java programming knowledge

2. The report will show that the learner understands the principles of Java programming.

- No rationales / principles given or the given rationales / principles are completely irrelevant
- coherent, detailed and very well explained, showing great command and understanding of the rationales / principles of Java programming

Java programming skills and application

3. The application of Java in the design of the web-enabled software is adequate and appropriate as shown in the programming script.

- Completely incorrect programming
- Evidence of succinct built-in logic of the programming script

Reflective skills

4. The learner has the self-evaluative ability to review and enhance the final software product as shown in the report.

/

Tips

- Select a practicable assessment task that is valid to measure the learner's performance of applicable ILO(s) at the claimed QF level.
- When writing a rubric, start with writing the assessment criteria for unacceptable performance. Then, use distinctive and well-defined terms for each achievement level.
- Be sure to check that the rubric covers all dimensions of performance that the assessment task intends to measure and provides clearly defined assessment criteria to ensure reliability.

Part 3 Assigning QF Level

Following the above five steps, you should now be able to ensure the alignment of programme objectives, PILOs, learning and teaching activities, and assessment tasks (Constructive Alignment) to enable the target learners to have a fair chance to attain the PILOs at the claimed QF level.

The best possible way to assign a QF level to a qualification obtained from a constructively aligned learning programme is to thoroughly consider whether the PILOs match with the intended QF level. The following figure shows the mapping of the PILOs against some key characteristics of the GLD for assigning QF level:



Tips

- Depending on the programme objectives, it is not necessary for all descriptors at one specific QF level in the GLD to be included as the PILOs. For example, the PILOs of a learning programme with a focus on the technical know-how of hair dyeing are unlikely to cover ICT competency.
- If you are uncertain of the QF level, check one level above and below for comparison and identify what appears to be the dominant QF level. In other words, please choose the QF level that best matches the PILOs. In most cases, you will need to interpret the descriptors in the GLD and apply them in your own context.
- Be sure to check that the rubric covers all the important dimensions of performance and it measures the targeted outcome(s).

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