

## Learning Institute Good Practice Guide on Writing Aims and Learning Outcomes



#### Introduction

This is the second of a series of Good Practice Guides which will be produced and distributed by The Learning Institute.

Many universities and colleges across the world now use an 'outcomes-based' approach to learning. At its most basic, this approach can simply be taken to mean an approach to teaching which sets out information at the start of the course or unit of study about what the staff teaching that course expect the students to have learnt, or to be able to do, by the end of the course. On the other hand, defining learning outcomes can provide a useful focus for curriculum design or review.

This good practice guide has been written to help members of staff write more focussed and useful aims and learning outcomes for programmes, courses and units. It gives a background to the use of aims and outcomes, as well as defining differences in the current use of the concepts. It then goes on to consider ways in which we might write intended learning outcomes at different levels within programmes, as well as how these can then be linked to assessment processes.

Within this guide, we use the term 'programme' for a complete programme of study (such as an undergraduate degree) and the term 'module' for a unit within a programme which has a discreet package of learning contained within it. We are mindful of the fact that different schools and faculties within the College use different approaches to 'modules' and even different terms are used for them, but to save confusion this is the term we have adopted throughout for these smaller units of learning. We also use the generic term 'course' where we wish to include both 'programmes' and 'modules' in a statement.

## What are learning outcomes?

In the main there are three terms which you are likely to come across in curriculum design and looking at how to encapsulate the intentions of the course or programme. These three terms are aims, objectives, and outcomes. This guide will focus on writing and using learning outcomes, but it is useful to know the differences between these and aims, particularly. At Queen Mary all Programme Specifications contain details of the 'intended learning outcomes' of a programme of study.



### Aims

Programme or module aims serve as broad purposes or goals and are generally a statement of the intentions of the teacher or school when designing or running the course. They are not intended to be statements of what students will learn or do, but rather over-arching intentions of the course. At a basic level, aims are trying to answer two questions:

- What is the purpose of this programme or module?
- What is the programme or module trying to achieve?

For optional modules, aims are there to help students make decisions about whether this is a module they wish to take. For compulsory modules, they are there to give the students a very brief idea of what the intention of the course is. For core modules (modules that must be passed in order to meet award regulations), aims illustrate the key nature of the module in relation to the programme students are studying.

Aims should be brief, succinct and give students a reasonable idea of what to expect from the course.

Some examples of aims might be:

- To provide a critical overview of the state of political debate in Britain during the nineteenth century
- To allow students to evaluate current research in particle physics
- To provide students with a range of opportunities to practice clinical and communications skills

#### Objectives

When teachers in higher education first began trying to give formal or semi-formal information about the content of their courses, they tended to use aims and objectives. In this circumstance, objectives can be defined as the steps which will be taken to move towards a goal. For instance, a learning objective might be 'To introduce students to the history and development of complex numbers'. As you can see from this example, one problem with objectives is that it can be difficult to distinguish them from aims, particularly when describing modules rather than programmes.

In recent years, however, the trend in higher education has been to move away from objective-based learning and more towards outcomes-based learning. In essence, this has been part of a wider move from a teacher-focussed approach to learning to a more student-focussed approach. Objectives, therefore, spring directly from aims and are statements of the specific things which the teachers of the course intend to achieve during the course. Current best practice would encourage staff to try to re-frame objectives as learning outcomes. So, an objective stated above might now be re-framed into an outcome such as 'By the end of this course, students should be able to outline the history and development of complex numbers'. Whilst this might be seen as a purely semantic shift, for more complex objectives it is more generally agreed that it is more helpful for students to understand what is expected of them, rather than what they will be taught.

#### Learning Outcomes

Simply put, learning outcomes are the skills and knowledge which it is intended that students should be able to demonstrate by the time the assessment processes for the course have been completed. The intention of learning outcomes is to give students more idea of what is expected of them during the course they are undertaking. As mentioned above, objectives state what the teacher plans to achieve, outcomes state what it is that the student should achieve.

Programme Learning outcomes are therefore statements of what successful students will achieve as a result of receiving their award. They are not a wish list or a statement of the programme content. Neither are they simply an aggregation of the module learning outcomes – they are more than the sum of their parts. Well designed learning outcomes:

- Relate to the programme aims;
- Refer to relevant external reference points;
- Are clear to staff, students and external examiners.

In designing learning outcomes programme organisers/ developers should ensure that they have regard to:

- (i) the appropriate level of study according to the Framework for Higher Education Qualifications
- (ii) the SEEC Credit Level Descriptors for FE and HE 2003
- (iii) any relevant Subject Benchmark statements
- (iv) relevant professional body requirements
- (v) the Queen Mary Statement of Graduate Attributes

There is some debate in the literature as to whether outcomes should outline what the threshold for passing a course is (so an outcome is, in effect, the minimum standard that student should achieve), or whether they should represent what it is expected that the typical student should be able to do. Unless there is a very clear reason for adopting a threshold approach to outcomes, the typical student should be used, as it is more likely to allow students to perform well (the threshold approach can lead to students aiming only for the threshold, rather than aiming higher). That said, the threshold approach is very useful when using outcomes to define grade-related assessment criteria.

One main reason for developing learning outcomes is to help align teaching with assessment. Learning outcomes give students and staff clearer guidance on what skills and knowledge will be assessed during or after the course. It is important to note that all learning outcomes should be assessable, but not all learning outcomes might be directly assessed (for instance, in an essay based course, individual students may not cover all the outcomes in their essays but these may well still be passable, yet all the outcomes should be capable of being assessed). The designation of constituent core modules within a programme is also particularly important in this context since programme learning outcomes should be linked to core modules and vice-versa, as core modules must be passed.

## Problems with, and challenges to, the outcomes-based approach

Whilst outcomes-based learning is now widely accepted, there are a number of possible problems with it, and there have been a number of challenges to it. This short section will outline a view of the most common problems or criticisms of an outcomes-based approach, and attempt to show how these problems can be overcome.

The main problem with the shift from an objective-based approach to an outcomes-based one is that we can only articulate intended learning outcomes. All academics will have examples of unintended outcomes which individual students, or groups of students, have attained during courses, which they could not have foreseen. This is not surprising, as students may take a different approach to a topic, or come from a different disciplinary background which they then bring to bear on the courses we teach. It is important to make allowance for these when teaching. One legitimate criticism of the outcomes-based approach is that it does not give room for creativity. This can be so when outcomes are either too narrowly framed, or when they are seen as the only possible outcomes from the course, and this approach is not to be encouraged.

A second criticism that has been made about an outcomesbased approach to teaching in higher education is that it can lead to spoon-feeding, and that students can come to see that all they need achieve can be contained within the outcomes for the course. This is usually the case when the outcomes have been written with more of an eye to the management or quality assurance uses of outcomes, rather than when they are written with the intention of helping student understand what it is that will be expected to achieve by the end of the course. Outcomes should not be seen as replacements for a detailed syllabus, nor for guidance on specific assessments that students will undertake. As stated above, we would recommend outcomes are aimed at the typical student, and that it is made clear to students that these are not the threshold at which a pass can be obtained.

A third problem with outcomes, which is linked to the problem of unintended outcomes above, is that they are written by a member of staff who may well have more understanding of the mechanisms and demands of higher education than the students will. Hussey and Smith (2002) cite the outcome which states that students 'will describe the structure and function of the human ear' and state that a literally correct response would be 'a hole in the head where the sound goes in' but that this is unlikely to be an appropriate response for students in higher education. Whilst this is undeniably true, it is important to see learning outcomes as a part of the outline for a module, and that the underlying assumptions and expectations of study at university level (and at the different levels therein) must be explained or passed on to students as well as the outcomes. Writing useful learning outcomes should not be an attempt to encapsulate everything that the students should know about the course in a set of short, yet precise statements.

## Writing learning outcomes

As has been stated above, useful learning outcomes are those which describe what the typical student will be able to do by the time the course has been completed, and which can be assessed to measure to what extent students have achieved these outcomes. A useful way to think of this might be that a less useful outcome would describe the understanding that students are expected to have developed, whereas a more useful one would outline how they can articulate, or demonstrate this. For instance 'by the end of this module, students will understand Newton's Laws of Motion' is not only unhelpful, but also not easily assessable. An outcome which states that 'by the end of this module, students will be able to describe how Newton's Laws of Motion can be used to investigate the movement of bodies' can be much more easily assessed.

#### When writing helpful learning outcomes remember:

- Write in the future tense 'by the end of this module, students will be able to...'
- Don't try to use outcomes to replace your syllabus identify the most important things you want the students to learn, and try keep the number of outcomes to between 4 and 6
- Make sure that your outcomes are achievable and assessable – think about how you might assess the outcomes as you write them and excise any which are vague, unclear or unassessable
- Try to use language that students will understand try to avoid jargon and abbreviations. For outcomes for modules in early years of a course, try to pitch the language as simply as possible.

- Include process as well as product try not to make the outcome match the product, rather use the outcome to show what process you expect students to undertake.
  For instance, 'be able to write a research dissertation' is not a helpful outcome, as it requires students to understand what the process of writing the dissertation is. 'Be able to plan and implement a research project' is more helpful, as it shows the process we are asking the students to undertake more clearly.
- Write at the appropriate level for the course we will talk about this in more detail later.
- · Have a balance of different types of outcome

#### Some possible types of outcome are:

- Knowledge-based (knowledge and understanding)

   these are often the most common type of outcome.
   They describe a set of knowledge that student will be expected to have acquired by the end of the course.
- Application-based (practical skills) As well as being able to recall information, learning outcomes should describe the kinds of application or transformation that students will be expected to make of that information. At higher levels outcomes should show that students should be able to engage with knowledge critically, to evaluate it, or to analyse or synthesise complex data.
- Skills-based (intellectual and transferable skills) Learning outcomes should cover skills development as well as knowledge acquisition. If you intend to assess students' capability in a particular skill, think about how you express that as an outcome for the course. This is particularly important with transferable skills. A helpful set of learning outcomes for a module (especially one in the first year of a course) will include some coverage of the transferable or non-subject specific skills you want students to develop as well as the subject-specific skills and knowledge.

### Getting the level right

One of the most important things about writing helpful learning outcomes is to ensure that outcomes are stated in language consistent with the requirements of different levels of study. This does not mean 'dumbing down' or patronising students, rather it means trying to use appropriate verbs and adverbs to help students better understand what is expected of them on the programme or module. While the content and wording of aims will often give an indication as to level, this may not (and strictly need not) be the case. The same aim may be construed at more than one Level through the use of different learning outcomes. The outcomes taken together with the assessment criteria will be the definitive measure of level, rather than the aims or content.

Often, in thinking of level of learning, you will see Benjamin Bloom's Taxonomy of Educational Objectives cited. Developed in the 1950s, Bloom's work in classifying cognitive ability is very helpful when writing learning outcomes, to ensure that you pitch the outcome at the right level. The main way in which the taxonomy is helpful is in giving you some active verbs to use when putting together your outcomes. The table below sets out the six levels in the taxonomy and is based on work from Stefani (2009), as well as work done by Professor Omar Garcia here at QM.

A couple of caveats, however. Firstly, do not take the suggested verbs as being the only ones possible, nor as fitting only into one level. Some verbs we use may well operate at more than one level. Also, different authors will put the same verbs under different levels. For example, the word 'analyse' is a higher order skill, but this word is often used at Level 3 – relating to relatively simple versions of the skill. At Level 6 'analyse' may be used again – but this time relating to relatively complex versions of the same skill. Secondly, don't expect students to be able to carry out

higher level tasks without the basic levels. Whilst it is perfectly possible to recall something without understanding it, it is not feasible to expect students to apply knowledge that they have not first been able to recall. Do not fall into the trap of assuming that students can already operate at the lower levels on entry to the College, and that we only need operate at the higher levels. Even for the most complex, high level courses there will still be a need for students to memorise and be able to recall facts as well as interpret, apply and analyse them.

In Bloom's hierarchy, verbs relating to the 'lower' cognitive processes (such as those grouped under 'knowledge' and 'comprehension') will be more likely to be used in outcomes for 'lower' levels of study (Levels 4 and 5), while those related to 'higher' cognitive processes (such as 'synthesis' and 'evaluation') are more likely at Levels 6 or 7. But this is only more likely — it is not always the case.



## Getting the level right

Level of cognitive ability	What does it mean?	What verbs are useful?	Example outcomes – 'By the end of this module students will be able to'
Knowledge	What do we expect students to know? This basic level focuses on recall and description.	Know; Define; Memorise; List; Recall; Name; Relate; Identify; State; Describe; Show; Quote; Present	List the operation principles of common digital circuit applications Identify key features of single celled organisms Identify and describe different forms of the sonnet
Comprehension	What do we expect students to be able to interpret? How do students convey their understanding as well as their recall?	Discuss; Review; Explain; Locate; Illustrate; Clarify; Select; Summarise; Conclude;	Explain how the life cycle of a lytic virus operates Review a range of social science research methods
Application	Can students use a theory or information in different situations? Are students able to articulate the relevance of teaching in other circumstances?	Solve; Examine; Modify; Interpret; Apply; Use; Practise; Demonstrate; Classify;	Use P200 and P1000 Gilson pipettes independently and accurately Use a Lineweaver-Burke plot to calculate Vmax and Km Apply appropriate statistical tests to a dataset

Level of cognitive ability	What does it mean?	What verbs are useful?	Example outcomes – 'By the end of this module students will be able to'
Analysis	Can students identify and explain relationships between material? Can they break knowledge down into constituent parts and show how these parts relate to each other?	Differentiate; Investigate; Appraise; Criticise: Debate: Compare; Contrast; Distinguish; Analyse	Calculate how many white blood cells are in a litre of blood Compare the replication processes of RNA and DNA viruses Analyse recent news stories using the IPA's seven common propaganda devices
Synthesis	Can students take the elements of what they have learnt and put them together in a different way? Can they develop a plan or a proposal from a set of knowledge?	Assemble; Organise; Compose; Propose; Construct; Design; Create; Manage; Develop; Specify; Modify	Construct a dichotomous classification key to identify plant specimens Design programs using selection statements Manage the budget for a practical film production project
Evaluation	Can students make judgements about knowledge? Can they construct an argument or compare opposing views?	Judge; Select; Evaluate; Choose; Assess; Rate; Measure; Argue; Defend.	Evaluate the possible approaches to film-editing Debate the statement "There is a gene for every behaviour" Assess to what extent educational theory is applicable to education policy

## Linking learning outcomes with teaching and assessment

Writing learning outcomes for courses should not be seen as an aim in itself, they should be used as an integral part of both curriculum design and teaching. This integration of outcomes with both assessment and teaching was called 'constructive alignment' by Biggs (1999).

Constructive alignment means asking yourself three main questions when thinking about designing courses:

- What should the students know or be able to do by the end of the course (what are the intended learning outcomes)?
- What methods will I use in my teaching to encourage students to work towards the achievement of these outcomes?
- How will I design assessment in such a way that the tasks and criteria I use help both me and the students know that they have achieved the outcomes I have intended?

If we use these three questions each time we undertake any form of curriculum development or design, then learning outcomes will move away from being a purely managerial tool to a more useful tool for both students and staff as a means of defining and driving student learning. As mentioned above, whilst all outcomes should be assessable, it is not always necessary for all outcomes to be directly assessed. Also, be mindful of the fact that 'assessment' of outcomes may be through formative or informal assessment and feedback, rather than through formal or marked work. For instance, you may have an outcome which requires students to be able to make an argument orally, which could be assessed informally through feedback given on class presentations, or on discussions in tutorials, which may not be part of the formal assessment processes for your module.

# Outcomes in different circumstances

Another thing to keep in mind when undertaking curriculum design is that you will need to approach learning outcomes differently for different circumstances. There are four basic circumstances in which we might want to devise learning outcomes:

- for programmes as a whole, to give students an overview of the intended outcomes at the end of their degree course;
- for individual levels of a programme, to give students an understanding of how we expect them to develop during one academic year of their course, or equivalent for parttime students (this is only really relevant at undergraduate level, since Masters courses are generally all at one level)
- for modules on a course, to show students the skills and knowledge we expect them to have acquired during a discreet unit of learning (this may be a one-semester module, a year-long module, or a thread which runs through a number of years of a programme)
- for individual sessions in a module, to help students grasp what the intentions of the session will be.

In each of these circumstances you will want to write a different kind of learning outcome.



# Outcomes in different circumstances

For programmes you will want to write fairly broad outcomes, which cover a wide range of skills and knowledge and which are unlikely to be directly assessed, but which will be tested by a range of assessments across the modules contained within those programmes. A variation of this approach is where the programme outcomes are formulated in terms of attributes, or capabilities which may be generic (for example the Queen Mary Graduate Attributes) or subject specific (how you express what is it that a graduate from your discipline can offer to a non-specialist employer).

For modules, you will be looking to be more specific in the skills and knowledge you are looking for, and these are much more likely to be directly linked to assessments carried out during the module.

For individual sessions, the outcomes are likely to be very narrow and specific and you may well not have direct formal assessment, but the students are more likely to be selfassessing their knowledge or skills, or receiving informal feedback on their progress. That is not to say that formal assessment is never used at session level – you may have practical reports, assessed problem sheets or other assessments which do assess skills and knowledge at the session level.

The other difference which you may encounter with the different circumstances is that the number of outcomes may well differ. For instance, there is rarely a need for more than three or four outcomes for an individual session, otherwise they start moving more towards a description of the syllabus than the outcomes you intend students to be able to achieve.

#### References

Biggs, J. 1999. *Teaching for quality learning at university: What the student does*. Buckingham: The Society for Research into Higher Education and Open University Press.

Bloom B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.

Hussey, T., and Smith, P. 2002. The trouble with learning outcomes *Active learning in higher education* **3** (3) pp 220-233

Stefani, L. 2009. Planning teaching and learning: curriculum design and development IN Fry, H. et al (eds) *A handbook for teaching and learning in higher education* 3rd ed. London: Routledge.

## Appendix

#### 1 Reference points for learning outcomes

Throughout the programme development process Programme Proposers should take due consideration of the Academic Infrastructure and various external reference points detailed below. This is in addition to the key QM internal reference points, such as the Academic Regulations; Queen Mary Academic Credit Framework; QM Graduate Attributes Statement; and Learning, Teaching and Assessment Strategy. The QM Programme and Module Developer's Guidelines should also be consulted.

#### 1.1 FHEQ, SEEC level descriptors

**1.1.1. Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008)** (http://www.qaa.ac.uk/academicinfrastructure/FHEQ/ EWNI/default.asp)

This summary has been extracted from FHEQ.

The Framework for Higher Education Qualifications (FHEQ) is designed to ensure a consistent use of qualification titles. Its main purposes are:

- for employers, schools, parents, prospective students, etc. to understand HE qualifications;
- to assist students to identify potential progression routes;
- to assist Universities, external examiners & QAA reviewers, by providing points of reference.

FHEQ informs these 'stakeholders' what the holders of the named qualifications have achieved, and the skills they would bring to a job. The HE qualifications awarded are at five levels: Certificate, Intermediate, Honours, Masters and Doctoral

#### Application of FHEQ in curriculum design

FHEQ is used to exemplify the outcomes of the main qualification at each level and demonstrate the nature of change between levels. The descriptors are an essential reference point in determining the intended programme learning outcomes. However, they are generic level descriptors, and so should be used in association with other external reference points such as QAA Subject Benchmark statements and professional body statements in order to develop programme-relevant learning outcomes.

For the purpose of programme development, the Southern England Consortium for Credit Accumulation and Transfer (SEEC) credit level descriptors can be used as a reference point for identifying module learning outcomes at each academic level.

The FHEQ is summarised in Appendix B. For more detailed descriptions at each level, refer to the QAA website (at the URL identified).

#### 1.1.2. SEEC Credit Level Descriptors for FE and HE 2003

(http://www.seecoffice.org.uk/creditleveldescriptors2003.pdf)

This summary has been extracted from the SEEC Credit Level Descriptors for FE and HE 2003.

The SEEC credit level descriptors have been developed to complement FHEQ. They are used to locate the level of a module and to inform the definition of learning outcomes and assessment criteria at the specific level. They are aids to course development while FHEQ is an aid to the quality assurance of programmes and terminal qualifications.

The SEEC credit level descriptors are grouped under four headings for each level:

- Development of knowledge and understanding
- Cognitive/intellectual skills

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- Key transferable skills
- Practical skills

#### Application in curriculum design

Credit level descriptors can be used as the means by which each subject area can check the level of demand, complexity, depth of study and degree of learner autonomy expected at each level of the individual programme of study. The credit level descriptors are "generic"; it follows that course teams need to translate the generic descriptors into descriptors which identify the subject specific requirements of a programme of study. A useful exercise for subject teams is to examine their current provision by mapping their existing learning outcomes against the credit level descriptors and identifying areas of weaknesses and any gaps in the curriculum. The assessment of all learning outcomes identified within the template of the level descriptors can then be examined to identify skills which are not being assessed, or some which may be over-assessed. The descriptors can be used in the design of learning outcomes in a way which reflects the student's progression through a course of study and to write appropriate assessment criteria.

#### Application in the approval of programmes of study

Although the credit level descriptors are not 'standards', they provide useful indicators of learning outcomes expected at any stage and therefore may be used as the basis for judgements about the standard of work being required for particular awards. Each award should state the number of credits required at each specified level. Awards typically require credits at more than one level which are accumulated as students progress through the programme of study. Alternatively students can transfer credit already awarded. Programme and Module Approval Board will need to be satisfied that the proposed programme requires students to achieve appropriate standards of work at each level of the award. Credit level descriptors provide a template against which the learning outcomes of the modules within any given programme of learning can be tested to establish whether they are appropriate to the level at which the module is located. Programme and Module Approval Board may also wish to consider the overall coherence of students' programmes of study and progression through the programme in terms of increasing level of demand, complexity, depth of study and student autonomy.

#### 1.2 QAA Subject Benchmarks

#### (http://www.qaa.ac.uk/academicinfrastructure/ benchmark/default.asp)

The QAA Subject Benchmark statements identify the general expectations about standards of awards (usually Bachelors degrees with Honours) in a specific subject area. They describe the academic characteristics and standards of a subject area and the expectations of a graduate in terms of the knowledge, understanding and skills. They also discuss the teaching, learning and assessment processes appropriate to the discipline. There are currently 53 Honours degree benchmark statements and 9 Masters degree benchmark statements, accessible from the website identified above.

The relevant benchmark statements are an essential reference point for programme designers, and should be used in association with FHEQ and the SEEC credit level descriptors in defining the programme learning outcomes. Within each, expectations are expressed in terms of learning outcomes. These learning outcomes are usually expressed for the threshold level that students would be expected to have attained upon graduation. They are often (but not always) described in terms of (i) knowledge and understanding and (ii) skills, which in turn are usually sub-divided into intellectual skills, practical skills and transferable skills.

## Appendix

In preparing or reviewing Programme learning outcomes, Programme Proposers must relate their programmes to relevant Subject Benchmark statements, but should not be a direct copy of them. For some programmes a relevant benchmark statement may not be available. Whilst benchmark statements mostly focus on Honours degrees, postgraduate programmes may also demonstrate how they relate to the standard and outcomes of that award.

For some interdisciplinary programmes it may be inadequate to refer to only one set of benchmark statements. Where a number of Subject Benchmark statements are referred to it is for the programme team to decide on the appropriate balance, acknowledging that the outcomes of both/all statements cannot usually be achieved in the programme concerned.

#### 1.3 Professional and Statutory Regulatory Body (PSRB) requirements

The importance and relevance of Professional and Statutory Regulatory Bodies varies considerably from discipline to discipline. In some disciplines, programme accreditation from such bodies is attractive in that it improves graduate employability and so increases its attractiveness to prospective students, in others it is essential to the employability of its graduates. In some disciplines, no such bodies exist.

Whether the programme is accredited or not, the requirements of Professional or Statutory Regulatory Bodies give an idea of how the qualification is likely to be accepted by employers. They should be treated by programme development teams in much the same way as the QAA Subject Benchmark statements are. To varying extents, they give guidance on programme learning outcomes, teaching and learning methods, assessment methods, etc. Often these are complimentary to the QAA Subject Benchmark statements, but not always.

#### **1.4 Higher Education Academy (HE Academy)** (http://www.heacademy.ac.uk/)

The Higher Education Academy (HE Academy) gives access to a range of academic resources of use to programme development teams, at both HE-wide and subject levels. Resource subjects include:

- Assessment
- Continuing Professional Development
- Curriculum development
- Disability
- E-learning
- Employability
- Learning and Teaching methods
- Subject Benchmarking
- Widening Participation

There are also 24 subject centres (formerly the Learning and Teaching Support Network, LTSN) which offer a range of resources on a similar range of matters.

**1.5 The Queen Mary Statement of Graduate Attributes** The Queen Mary Statement of Graduate Attributes describes the knowledge, skills values and behaviours expected of Queen Mary graduates. As such it provides a key reference point for the development and enhancement of curriculum provision as well as providing a framework for students' personal development planning.

The distinctive learning environment provided by Queen Mary reflects its position as a leading research-intensive institution in London that draws its students from a culturally diverse set of communities, and that prepares its students for the complexities of the twenty-first century.

## Appendix

Queen Mary is committed to producing graduates with the knowledge and ability to take full advantage of the range of distinctive attributes they possess as a result of their experiences at Queen Mary.

The statement of graduate attributes captures this distinctive environment, using seven attribute themes grouped into the categories of Vision and Realisation. The three Vision attributes embody the core attributes at the heart of the College's framework for teaching and learning across the institution as a whole, while the four Realisation attributes express ways in which this framework will be instantiated at disciplinary and departmental level. All seven attributes, taken together, reflect the most significant elements of the learning experience achievable through study and engagement in the wider Queen Mary student experience. For further information please see the following link: http://www.qmul.ac.uk/gacep/.



This guide was written by Dr Matthew Williamson for The Learning Institute at Queen Mary, University of London. With contributions from Ken Chow and Jane Pallant from the Quality Assurance Unit.

This is the second in a series of QM Good Practice Guides. Guides in preparation cover topics including:

- Deterring, detecting and dealing with plagiarism
- Observation of teaching
- Dealing with disruptive behaviour in teaching

If you have any suggestions for titles in the series, do contact Dr Matthew Williamson, Education Adviser in The Learning Institute (m.williamson@qmul.ac.uk).

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