

UKPSF Dimensions of the Framework Biochemistry and Molecular Biosciences







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Introduction

Associate Fellowship of the Higher Education Academy (AFHEA) gives you national and international recognition for your work in learning and teaching Higher Education (HE). This in document is a guide for early career scientists, PhD students and technical support staff in the biosciences who are involved in teaching and learning in HE. The guidance has been created to aid in identifying and reflecting on the teaching practice relevant to the life sciences when putting together a Fellowship application. Disciplinespecific examples for each of the dimensions of the UK Professional Standards Framework (UKPSF) are provided as illustrations of practice. Cases studies are also included to highlight the type of evidence that can be drawn on when applying for AFHEA status.

The UK Professional Standards Framework (UKPSF, 2011)

The <u>UK Professional Standards Framework 2011 (UKPSF, 2011) for</u> teaching and supporting learning in higher education provides a national and international framework for recognising and benchmarking teaching and learning support roles within higher education.

The UKPSF has two components: the Dimensions and the Descriptors. The UKPSF Descriptors are a set of statements (referred to as Descriptor 'criteria') outlining the key characteristics of someone evidencing four broad categories of typical teaching and learning support roles within higher education.

What are the UKPSF Dimensions of the Framework?

The UKPSF identifies the diversity of higher education teaching, support roles and environments. This diversity is reflected and expressed in the Dimensions of the Framework and outlined in three key sets as follows:

- Areas of Activity (A), which you undertake when teaching, supporting and facilitating learning in higher education;
- Core Knowledge (K), which is needed to carry out the areas of activity;
- **Professional Values (V)**, which you should embrace and demonstrate in your teaching or support of teaching.

These three sets of Dimensions, when combined, cover the complexity of professional roles in teaching and supporting learning in higher education; be it teaching, technical support, student support or the supervision of research students.



HEA Fellowship scheme

The HEA Fellowship scheme, run by <u>Advance HE</u>, maps on to the UK Professional Standards Framework (UKPSF), which is sector owned and developed. The four categories of HEA Fellowship, based on the four UKPSF Descriptor statements 1–4, are:

- Associate Fellowship;
- Fellowship;
- Senior Fellowship;
- Principal Fellowship.

The scheme provides an opportunity for all who teach and support HE learning to achieve professional recognition of their practice, from new entrants to senior leaders. To gain a category of Fellowship, you are required to demonstrate how your professional practice relates to the UKPSF.

HEA Fellowships are for the wide range of individuals that teach and support HE learning, not just academic members of staff. Postgraduate students with teaching responsibilities, learning support staff, clinicians, technicians, librarians and others are eligible to apply, as long as they are able to fulfil the requirements of the relevant UKPSF Descriptor through a peer-reviewed application process.

Most UK universities and an increasing number of institutions have Advance HE accredited routes for awarding Fellowships. If your institution is a member of Advance HE, there is no additional fee for your HE Fellowship, so you should investigate local opportunities first. This will also link you into the active community of Fellows within your own institution. If you are not employed by an Advance HE member institution or if you would prefer to apply directly to Advance HE, you can pay to apply via a written evidence-based account of practice supported by referees. In either route, submissions for Fellowship are reviewed by peers holding an appropriate category of Fellowship themselves and trained to review applications. The format of the application will vary depending on what your institution has accredited but the types of evidence required need to address the UKPSF.



What is the right category of Fellowship for me?

The <u>Advance HE website</u> has guidance about the requirements of the different categories of Fellowship, including a free web-based tool to help you decide the appropriate category.

The <u>Advance HE's Fellowship Category Tool</u> has been designed to assist you in selecting the category of Fellowship that is the closest match to your current practice.

If your own institution has an accredited route to Fellowship, then you should be able to access guidance and support to develop an application.

You can see below about how the Fellowship categories align with typical roles and career stages.

Associate Fellow – Descriptor 1 (D1)

- PhD student involved in supporting the learning of students
- Postdoctoral researcher involved in the delivery of taught material or the supervision of research students.
- Technical support staff supporting the learning of students or developing learning activities.
- Associate or visiting lecturer delivering specific content on a focused area.
- Clinical supervisor supporting students' learning in a healthcare or academic environment.

Fellow – Descriptor 2 (D2)

- Lecturer or postdoctoral researcher with teaching responsibilities, typically leading a module;
- Senior technician or support staff with responsibility for design and delivery of learning activities.

Senior Fellow – Descriptor 3 (D3)

• An academic or support staff who may have led the development of learning initiatives across different areas or programs.

Principal Fellow - Descriptor 4 (D4)

• An experienced academic or support staff who has wide-ranging strategic leadership responsibilities in connection with key aspects of teaching and supporting learning



Associate Fellow – Descriptor 1 (D1)

Associate Fellowship (AFHEA) is the first of the four categories of HEA Fellowship and is aligned to Descriptor 1 (<u>UKPSF</u>, 2011: p4). Associate Fellowship is appropriate for individuals involved in specific aspects of teaching and/or learning support in HE.

There are five Areas of Activity, and as AFHEA you need to show evidence of engagement with at least two of them. You also need to show successful engagement, where appropriate, in professional development activities related to teaching, learning, and assessment responsibilities. You need to decide on which two Areas of Activity you will focus on and this varies depending on an individual's practice.

For example, some Postgraduate Teaching Assistants, Graduate Teaching Assistants and Postdoctoral researchers only teach seminars alongside someone else's lectures or undertake other learning support activities alongside senior colleagues without being involved in curriculum design and planning. In this case, it would be helpful to concentrate on A2 as one of your activities rather than A1. Associate Lecturers might be mainly involved in marking and giving feedback on assignments and exams set by other people, in which case A3 is a key focus. Staff involved more with the student support or learning support aspects of education may wish to focus more on A4.

- A1: Design and plan learning activities and/or programmes of study;
- A2: Teach and/or support learning;
- A3: Assess and give feedback to learners;
- A4: Develop effective learning environments and approaches to student support and guidance;
- A5: Engage in continuing professional development in subjects/ disciplines and their pedagogy, incorporating research, scholarship and the evaluation of professional practices.

The six aspects of Core Knowledge are below. At AFHEA level, you need to show evidence of engagement with K1 and K2, but you may also evidence K3-K6.

- K1: The subject material;
- K2: Appropriate methods for teaching, learning, and assessing in the subject area and at the level of the academic programme;
- K3: How students learn, both generally and within their subject/disciplinary area(s);
- K4: The use and value of appropriate learning technologies;
- K5: Methods of evaluating the effectiveness of teaching;
- K6: The implications of quality assurance and quality enhancement for academic and professional practice with a particular focus on teaching.

The focus of Professional Values is associated with the integrity of the individual practitioner. How you are able to demonstrate this is likely to be different depending on your role. AFHEAs need to show a commitment to appropriate Professional Values in facilitating others' learning.

- V1: Respect individual learners and diverse learning communities;
- V2: Promote participation in higher education and equality of opportunity for learners;
- V3: Use evidence-informed approaches and the outcomes from research, scholarship and continuing professional development;
- V4: Acknowledges the wider context in which higher education operates recognising the implications for professional practice.

Reflection and mapping your activities to the UKPSF

Before writing your application, it is useful to reflect on your practice, what it is you are doing, the context in which it is occurring and why you operate in that way. Reflection is central to Fellowship applications, yet many scientists find it challenging to write in a reflective manner. In essence, reflection can be broken down into:

- What did you do? The situation;
- Why did you do it? The evidence base;
- How well did it work? The outcome;
- So what? The changes made or implications.

The Learning Cycle developed by David Kolb is one way of structuring this reflection; other methods, such as the Gibbs reflective cycle, are also useful. These cycles are based on the idea that deep learning (learning for real comprehension) comes from a round of experience, reflection, development and active testing. Standing back, think about what has happened, identify difficulties and focus on areas for improvement, then put this into practice. This is the reflective cycle in action.

In your application, you will need to consider how the activities you are reflecting on map to the UKPSF. It is not a requirement to indicate your mapping directly in the submission but reviewers often find it helpful. Examples of the type of activity you could consider are below:

- A PhD student supporting an academic member of staff in the delivery of a laboratory class [A2, K2, V1];
- A postdoctoral researcher running a small group seminar supporting taught material delivered during lectures [A1, K1, V3];
- A technician who supports learning through the development of laboratory practicals [A5, K2];
- A visiting lecturer who designs and delivers a component of a module based on specific skills and experience [A1, K2, V2];
- A member of the Biochemical Society, involved in the design and delivery of a short training course [A1, V4;]
- A learning technologist or librarian who has helped implement and/or evaluate a new learning technology for a cohort of students, which was selected through engaging with the pedagogical research [A4, K4, V3].

The following sections break down each of the dimensions of practice and give indicative examples of engagement alongside examples from successful submissions from other bioscientists.

WHAT did you do?

did you do it?

HOW well did it work?

SO WHAT were the changes/implications?

Areas of Activity



What is this Area of Activity about?

This is about your approach to planning and preparation of students' learning activities, whether face-to-face or in a virtual learning environment.

How can I demonstrate my engagement?

You may not have a great deal of autonomy in this process or you may have total responsibility for design. You need to reflect on how you identify and plan different types of interactions with learners within a given context. These could be taught sessions, or a series of sessions with individual students and/or small groups.

Your application could include the following examples:

- delivering one-to-one tuition;
- designing learning activities;
- developing individual learning plans;
- supporting laboratory practicals and projects;
- developing online learning resources/VLE materials;
- providing additional learning support.

Case study example A1

"A practical for the postgraduate students was failing to work experimentally, thus detracting from the specific learning outcomes expected by the students (to successfully undertaking a biological assay and to analysis of experimental results). I was asked to develop the laboratory class so it would vield beneficial and reliable results. However, I had to consider whether any alternative method would be deliverable and would fit into the time allocated for this practical. By liaising with the academic staff and using my own knowledge in this area, I developed the class and laboratory manual so it was challenging but achievable by the students. The results were analysed as originally planned and were gained using the same equipment. This created an effective learning experience, unlike previous years."

"As a follow up to a taught lecture, I am involved in running small group seminars to discuss theory and to apply biochemical knowledge. To ensure that all students have the opportunity to engage, prior to the seminar I send a recent research article to the group on the topic. Sending the article before the seminar gives the students the opportunity to read the abstract and review the figures, familiarising themselves with the work. Within the seminar a set format is used; we first look at the aims of the research and identify the key figures in the paper. The way in which the key method was used to address the research question is then discussed. Students are asked to talk with each other to identify other methods that could have been picked to address the same hypothesis before sharing with the group. This way the students have the opportunity to apply their knowledge in pairs without fear of being wrong in front of their friends."



A2: Teach and/or support learning

What is this Area of Activity about?

This is about your direct engagement and interaction with learners, whether in groups or individually, remotely or face-to-face.

How can I demonstrate my engagement?

You should demonstrate a current and ongoing awareness of different approaches and methods of teaching and supporting learning, as well as a growing ability to choose the most appropriate approach for the achievement of learning/curriculum aims. Examples include:

- Running seminars, tutorials or workshops with individuals or groups of students to support their learning;
- Facilitating practical laboratory sessions;
- Teaching as part of a team;
- Providing academic skills/learning support for students;
- Creating bespoke online resources;
- Supporting the development of students' research skills;
- One-to-one interactions, supporting the development of technical skills and data interpretation;
- Working with learners in a laboratory during capstone research projects;
- Workshops and masterclasses for a given method or technique;
- Involvement with community events and school education projects.

Case study example A2

"During the undergraduate project sessions, the students take different training courses to learn specific scientific techniques. Each training course has its own set of training notes. This allows the students to have something to refer to when they conduct the techniques themselves. On reviewing one particular training course, I noticed that the information contained in the notes were outdated and did not match what was being taught in the course. To provide continuity to the students, I updated these notes so that they encompassed all the updated information the students would require. This had a positive effect, as it was noticed during the project sessions the students had an increased understanding of this technique."

"Tutorials for the last two years of undergraduate degrees are run as a facilitated workshop, with small groups of learners working independently together; I found that this style works better the further students are into their degree studies (K2), and it's easier for peer learning to stay on task. I will often be asked questions that go beyond the scope of the course and tax the knowledge I acquired in my own PhD, or postdoctoral work; a great opportunity to put the course material into context by discussing current research and the places where taught simplifications break down (K1, V4)."

"During a residential field trip, I was asked to support several pairs of first-year students who had been asked to develop and carry out their own mini-projects. Fieldwork is an excellent vehicle for students to develop confidence and self-management by developing their own learning tasks (A1, K3), but it is also important to manage expectations of what is possible at an early stage in the degree and over a short time. I found I needed to judge the balance between allowing them space to make their own decisions and my needing to encourage them in a particular direction (A4). The students fed-back that they appreciated the freedom that I gave them but also valued my being there to provide advice and support."



A3: Assess and give feedback to learners

What is this Area of Activity about?

This is about how you assess and give feedback to learners to foster and encourage their learning, and how you make judgements.

How can I demonstrate my engagement?

At AFHEA level, you will normally not be setting or writing assessment criteria, but you will need to demonstrate an understanding of:

- The importance of assessment and feedback in the context of your work with students;
- How you make informed, formative judgements about students' work;
- The role that assessment and feedback plays in supporting learning;
- The appropriateness of the assessment approaches and feedback techniques for their specific context.

This could be through activities such as:

- One-to-one meetings in tutorials;
- Teaching sessions;
- Research interviews;
- Practical work;
- Observation of practice;
- Formal approaches to assessment such as exams, essays and tests;
- Practical and skills tests;
- Presentations and/or group work;
- Giving formative feedback to a small group as a facilitator.

It might include the feedback given on, for example:

- Guidance to students whilst working in the laboratory environment;
- Your assessment on submitted draft project/dissertation and how to improve it;
- Assessing summative work via practical examinations, exams, portfolio submissions, coursework essays, seminar presentations or oral presentations;
- Feedback on CVs for students seeking work;
- Judging students' understanding during and following practical training;
- Preparing students for assessment through academic support;
- Formative or summative feedback on students' group work or professionalism behaviours.

Case study example A3

"During the laboratory sessions, I use informal formative assessment. I carry out this formative assessment by walking around the lab class interacting with the students and asking them questions about the practice they are undertaking. This allows me to quickly assess the overall understanding of the class and enables me to decide if I need to re-iterate any introductory work if a large part of the class are unsure of the practice they are undertaking. I feel that this aspect of formative assessment works well within an experiential learning environment and motivates the students as I feel they are engaging in their own learning by asking guestions (Adams, 2009; Race, 2013)."

"As part of my duty as a teaching laboratory demonstrator, I resolve queries students have over marking done by other demonstrators; often, the issue is not the marks themselves but lack of feedback. Frequently trying to explain someone else's poorly-justified 0/3 has informed the way in which I do marking myself."

What is this Area of Activity about?

This descriptor covers how you effectively use both formal and informal learning spaces to facilitate student learning. It can also reflect on how you meet the needs of your learners for educational support and guidance. The examples you pick will vary greatly, depending on how you use the physical and virtual environments in which you teach or support learners.

How can I demonstrate my engagement?

To demonstrate engagement here, you should give a clear rationale for the different activities you use. Your emphasis should be on your understanding of the importance of the learning environment (lecture, seminar, lab), acknowledging the different ways that learning takes place within them. For example:

- One-to-one advice around a method, technique or item of equipment;
- Development of ideas through conversation to further aid understanding of a given topic;
- Setting up the laboratory environment for the practical sessions;
- Using screencasting to prepare students for a taught session (lecture flipping);
- Development of materials that students use in taught sessions.

Case study example A4

"Within a laboratory environment, I feel that students learn better if they could get a feel for a piece of equipment prior to using it. Therefore I have developed training videos on pieces of equipment which are used during the practical session. These videos are available to the students prior to the class and as such encourage self-directed learning. In the first vear lab 'Investigating differential centrifugation techniques'. I developed a training video which demonstrates how to use a centrifuge. The fundamental concept and learning outcome of using a centrifuge rely on balancing the tubes correctly. Incorporating an interactive section into the training video was key as the students are able to visualise what happens when the centrifuge is not balanced correctly. This visualisation really helps the students understand the importance of the steps in the technique and encourages them to think before using the centrifuge. I know this video was effective as in the subsequent lab I took with these students, they were highly aware of the importance of balancing the tubes in the centrifuge, because they remembered the video and could understand what happens when things go wrong."

"During residential field trips, I have noticed that the boundaries between formal and informal learning time become blurred. I have come to realise that it is important to appreciate the needs of each student as an individual rather than assume that all members of the group want to discuss their project work during the break periods that they see as 'personal' time. Through my demonstrating an awareness of individual needs and working patterns, I feel that I can better help students who are working in groups to be aware of the different needs of their peers (V1)."

A5: Engage in continuing professional development in subjects/disciplines and their pedagogy, incorporating research, scholarship and the evaluation of professional practices

What is this Area of Activity about?

This is about how you maintain and continue to develop your capability in teaching and learning support. It is a demonstration of how you incorporate subject and pedagogic research and/or scholarship knowledge within your teaching practice. In relation to your application, 'scholarship' should include a focus on pedagogy and your subject knowledge.

How can I demonstrate my engagement?

You do not have to be directly involved in research but you do need to indicate how you use scholarly and/or professional activity to maintain your teaching subject knowledge and/or support of learning. This could be by:

- Completion of learning and teaching workshops or courses;
- Attendance at learning and teaching conferences;
- Determining the ways in which your teaching has been effective;
- Requesting feedback on your teaching, reflecting on this and making changes as a result;
- Evidence of engagement with continuing professional development activities and how you have used the learning;
- Observation of teaching/student support with reflection;
- Attendance at bioscience conferences with an indication of how this has been used in your teaching practice;
- Engagement with your learned society or subject community, for example being on a Biochemical Society committee, panel or helping run a conference or training event;
- Use of scholarly outputs to inform your teaching practice.

Case study example A5

"I was unfamiliar with FTIR equipment and how it worked, so once I had learnt the theory behind it, I attended training on this piece of equipment so that I fully understood how it worked (A5). I then needed to design how I would actually demonstrate this piece of equipment to students (K2). To help me do this, I did the experiment the students would do on the FTIR. This allowed me to understand what the students would be doing and what would be the best way to demonstrate the equipment. After conversations with a senior academic, I decided to demonstrate the equipment in a stepwise manner and asking the students questions to assess their understanding. I would then allow the students to have a go at conducting each step themselves whilst I observed them. This would allow the students to get hands-on experience of doing the task and understand what they were doing through an experiential learning approach (Kolb, 1986)."

"I am an active researcher and many of the activities I undertake outside of the teaching environment feed directly into my practice and development. I undertake and have undertaken, significant public engagement roles during my career, where I discuss the concepts I may present in lectures to a public or school audience. Explaining complex concepts and research to the public helps me identify the key concepts and ideas that are later developed into materials for a higher level of learning."

"During my PhD I have attended national meetings organised by the British Ecological Society to discuss fieldwork based learning (A5). At these meetings, I have been able to share student evaluations of the effectiveness of the approach that I take and the positive feedback that I have received has enabled me to further refine my practice (A4)."

Core Knowledge

How should I show my understanding of the appropriate Core Knowledge?

For Associate Fellowship, you need to demonstrate engagement with both K1 and K2. You can link the Core Knowledge to Areas of Activity providing greater coherence and depth to the evidence and more accurately reflect an integrated approach to your teaching practice.

An example of the links that could be made:

• Teaching effectively within a practical laboratory environment (A2) successfully would be determined by your level of subject knowledge (K1) and the use of appropriate teaching and learning methods (K2).



K1: The subject material

What is this Core Knowledge about?

This statement is about how the design and planning of learning activities and programmes of study, together with associated teaching, assessment and feedback strategies, is informed and influenced by the subject being taught. In the context of molecular biosciences at Descriptor 1, this may be a particular practical skill, digital tool or seminar topic.

How can I demonstrate my engagement?

In the context of supporting learning, this may relate to practical skills, digital skills such as programming, use of a computational tool or statistical method, underpinning biological knowledge and how this links to learning and teaching methods. Examples might include:

- How you apply your biochemical research to inform the subject you teach;
- Up-to-date knowledge of current method;
- Development of resources;
- How the subject matter aligns with the wider course program and its assessments;
- Bringing emerging or cutting edge research into your teaching.

Case study example K1

"In the three years I have been doing my PhD, I have been marking assessments for the BSc Biomedical Science course (K1). I don't design the assignments, but I mark according to the supplied criteria and marking scheme. At first, I was really nervous about whether I was giving the right marks, but my colleague who does most of the teaching on the course helped me in getting to know what standard was required. I also took part in a CPD webinar led by the Programme Leader where we shared examples of best, average and poorest work, and discussed how to ensure the marks accurately measured performance (V3). We also talked a lot about feedback, about what kind of comments help students to improve, referring them for example to online practice resources on key concepts and how to couch criticism in terms that help the student move forward rather than feeling demoralised (K2). This gave me much more confidence and reassured me I was on the right lines. Some of our students have little prior knowledge of science at this level, and need a great deal of help in breaking down the concepts into manageable chunks. (K2). For this reason, I have pointed them towards some really useful YouTube videos in the area, and then developed some 'quick and dirty' online practice MCQ guizzes they can use to self-test, to build their confidence and knowledge (V1)."

"At all levels of teaching, I'm called on to use my degree and PhD knowledge (K1) to explain where and how students have gone wrong, but also take into account the level the student is at (V1) – how strictly are we marking? What level of detail do we expect? (K2). A teaching and learning course, "effective tutoring for the sciences" has been invaluable here, as well as extensive shadowing and co-tutoring with more senior teaching staff (V3)."

K2: Appropriate methods for teaching, learning and assessing in the subject area and at the level of the academic programme

What is this Core Knowledge about?

This is about those methods that are used for teaching and supporting learning in biosciences. When reflecting on this dimension, it is useful to consider that some approaches are more appropriate than others, given the nature of the learning, the level of the material being taught and the readiness or prior learning of students. There are clear links with A2 here.

How can I demonstrate my engagement?

It is about setting out why a given strategy or approach was chosen. This should be underpinned by scholarship and/or evidence to its effectiveness, and could be through:

- Examples of how you have used an element of pedagogical theory or scholarly practice to inform your teaching;
- Provision of training notes or scripts tailored to a student group;
- Examples of how you have selected or helped develop appropriate assessment methods to measure attainment in particular contexts.

Case study example K2

"I try to ensure in my seminars that all students participate, allowing the shyer ones to contribute by writing on post-its collected up halfway through the class if they feel embarrassed to speak in front of others (K2)."

"My style of teaching varies across the various activities I support. On the widening participation program, students have just left secondary school and are about to start a university career. Here, the lectures are lighter, with comprehensive handouts and clearly-defined spaces to take notes. It's important to engage and enthuse students at this early stage, so I use frequent practical demonstrations, worked examples and interactive Q&A sessions throughout the lectures (K2)."

"Most of my teaching is through fieldwork, and from the literature I know that students report higher levels of motivation and engagement when they feel that they have control or ownership of their learning. For this reason, I try to provide students with minimal guidance and maximum freedom where it is safe to do so (K2, K3)."



Professional Values

How should I demonstrate my commitment to the Professional Values?

The Professional Values underpin teaching and support, with a focus on the integrity of the individual practitioner. How you demonstrate this is likely to be different depending on your role. Each of the values overlaps with the Dimension of the Framework, and will influence the manner in which you perform an activity and the core knowledge that underpins it.

Professional Values in practice will influence teaching and learning, the adoption and communication of positive attitudes and behaviours. The values emerge in the way that you draw examples from your practice which gives the context, rationale, evidence and impact. For Descriptor 1, you need to demonstrate 'appropriate values'; i.e. you do not need to demonstrate all of the values, just those related to your own practice in the two Areas of Activity you have chosen to address.



V1: Respect individual learners and diverse learning communities

What is this Professional Value about?

This is about the way you consider and respond to the individual needs of students and communities. Learning communities may be individuals or groups of students who are campus-based, online or work-based. They may also be defined by the protected characteristics as outlined in the 2010 Equality Act. You need to be able to demonstrate that you value and can work effectively with and within these groups.

How can I demonstrate my engagement?

Here you can consider the way in which you respond to the individual needs of learners through your approach and delivery. For example:

- Designing and delivering of inclusive practical activities;
- Consideration of language support for international students;
- Designing your teaching materials so that they are accessible for students with dyslexia or other learning difficulties or disabilities;
- Tailoring your feedback to individual students' needs.

Case study example V1

"As the students receive a lecture on scientific writing, I collate generic feedback and speak with the lecturer delivering this session and outlining to them what the common issues are with the reports I marked. This allows the students to get quick depersonalized feedback on their formative report."

"The ability of the postgraduate students varies hugely and this can make it difficult when demonstrating different scientific techniques. Some students are very able and so need little help, whereas others need more support and guidance. To allow me to respect the diverse talents and ways in which the students learn (Chickering & Gamson, 1987), I asked the students to self-identify their own ability. Those who felt they were able to have a go at the technique unaided and asked for help as and when they felt they needed it. Those who felt they were less able were demonstrated the technique first and then had a go themself while being given hands-on support."



V2: Promote participation in higher education and equality of opportunity for learners

What is this Professional Value about?

This value is centred on your commitment to equality of opportunity for learners and their inclusion in higher education.

How can I demonstrate my engagement?

Evidence should indicate your approaches to ensuring equality of opportunity and be supported by examples of inclusive and accessible practice. For example:

- Adaptation of learning materials for easy accessibility and relevance to a given group;
- Providing transcripts of video material
- Ways in which you engage in widening participation;
- Alteration of delivery in response to external student commitments;
- Involvement as a STEM ambassador.

Case study example V2

"Each year, our department hosts a widening participation activity for local schools, particularly schools with pupils from poorer backgrounds. I am responsible for setting up all of the equipment, printing the manual, and interacting with the pupils on the day of the activity. The activity is an adapted undergraduate lab experiment, and I noticed some of the pupils were struggling and it made them less confident about university. I had some suggestions for changes we could make to make it less intimidating, and the activity coordinator adopted them."



V3: Use evidence-informed approaches and the outcomes from research, scholarship and continuing professional development

What is this Professional Value about?

This value is how you draw on (and contribute to) a range of sources of evidence in relation to teaching practice. You can draw on outcomes from relevant research, scholarship and professional development, and reflect on how you used them to inform your teaching and learning practice. You will find this value closely links to A5.

How can I demonstrate my engagement?

In this section, reflect on an approach you have taken, the evidence that unpins it, how you used that to inform your practice and what the effect on the learning of the students has been. Some examples include:

- Your consideration and application of the findings from pedagogical research papers;
- Application of learning theory;
- Reading blogs or attending seminars and a reflection of how you incorporated the ideas;
- Developing and/or using informed approaches to plan learning or support activities in response to relevant professional body *e.g.* RSB accreditation;
- Alterations to lectures or any other teaching sessions/resources following CPD activities or training;
- Involvement in (pedagogical) research projects;
- Changing delivery in response to module feedback, course meetings or NSS comments;
- Gathering student feedback on any new teaching or pilots you are doing, and using this to inform further developments.

Case study example V3

"At the end of each semester, academic staff who taught each lab are asked for their views of the practical and whether it is still fit for purpose. We also work closely with the technical team delivering these sessions to ensure that they work effectively. I have encouraged the students to comment on the practical sessions and this has led to a number of student-led recommendations. This has been particularly useful in the presentation of the lab manuals. Students have commented on how sections are hard to follow and in response to this I have re-written these to make them more user-friendly."



What is this Professional Value about?

This value is about being aware of the setting in which HE operates. For example, the way that professional body accreditation, government or research bodies influence the way you teach and the learning of students.

How can I demonstrate my engagement?

At AFHEA level, this is likely to be your response in partnership with others to current agendas, such as student engagement, closing attainment gaps between student groups and inclusive practice including reasonable adjustments for students with disabilities. Within a bioscience context, this may mean equipping students with suitable employability skills (numeracy, scientific integrity etc.) and core knowledge; for example:

- Ensuring ethical practices are followed;
- Responding to legislation around health and safety policies;
- Response to the needs raised by employers forums;
- Response to RSB or RSC accreditation requirements;
- Responding to science or education policy consultations, for example through your learned society.

Case study example V4

"Each year I work closely with a cohort of 2 or 3 final year students in a research lab, for up to six months. Students by this point may or may not have a clear idea of what they want to do post-graduation, and this crosses into the area of mentorship where I draw on my own experiences as a PhD student (K1). For example, a student expressed a desire to enter research and was assessed on rigour and reasoning, where a student seeking work in industry or publishing was given extensive feedback on written communication to a more professional standard rather than an academic one (V4)."

"Before the students can start their projects in the laboratory, they must have completed a risk assessment. This will allow them to understand COSHH and also adhere to good laboratory practice whilst conducting their experimental work. I was asked to review several risk assessments to make sure the students had completed them correctly. I found that some students had not fully understood what to do, so I had a one to one meeting with them and explained the process and why it was important. This then allowed them to complete the risk assessment correctly, to adhere to good laboratory practice during their project and ultimately work safely in the laboratory. Good laboratory practice and the ability to work safely are essential skills needed for any future employment in a laboratory setting."



Resources

AdvanceHE: Associate Fellowship Guidance

https://www.heacademy.ac.uk/individuals/fellowship/associate-fellow (accessed November 2019)

AdvanceHE: Fellowship Category Tool

https://www.heacademy.ac.uk/individuals/fellowship#section-2 (accessed November 2019)

The UK Professional Standards Framework, (2011)

https://www.heacademy.ac.uk/system/files/resources/ukpsf_2011_ english.pdf (accessed November 2019)

Edinburgh University 'Gibbs' reflective cycle'

https://www.ed.ac.uk/reflection/reflectors-toolkit/reflecting-onexperience/gibbs-reflective-cycle (accessed November 2019)

Lea, J. (2015) *Enhancing Learning and Teaching in Higher education: Engaging with the Dimensions of Dimensions of Practice*, Buckingham, Open University Press.

Plymouth University 'Seven Steps Guides'

https://www.plymouth.ac.uk/about-us/teaching-and-learning/ guidance-and-resources/7-step-series (accessed November 2019)

The University of Sheffield, assessment and feedback

https://www.sheffield.ac.uk/staff/elevate/essentials/assessmentfeedback-1 (Accessed May 2020)

Imperial College London, Introduction to assessment and feedback

https://www.imperial.ac.uk/staff/educational-development/teachingtoolkit/assessment-and-feedback/introduction-to-assessment-andfeedback/ (Accessed May 2020) Evans C. (2013), Making Sense of Assessment Feedback in Higher Education, *The Review of Educational Research*, 83 (1) https://journals.sagepub.com/doi/full/10.3102/0034654312474350

David Smith, Why does nobody read the feedback I write? https://davethesmith.wordpress.com/2018/06/01/why-does-nobodyread-the-feedback-i-write/

AdvanceHE: Dimensions of the Framework (Music) https://www.heacademy.ac.uk/system/files/downloads/UKPSF%20 Dimensions%20of%20the%20framework%20-%20Music.pdf (accessed November 2019)

