



1 Introduction and Summary

The Chartership Committee of GSL has noted that the recording of Continuing Professional Development (CPD) has fallen below the standard specified and expected of Fellows of the Society in too many cases, particularly for those who hold the EurGeol title and for Chartered Geologists and Scientists, where CPD is mandatory. Consequently, it commissioned a comprehensive survey of the present CPD arrangements of a wide range of professional bodies across the English-speaking world, in order to compare the existing GSL requirements for CPD, in relation to current good practice. The full CPD review paper (Talbot [Ed] 2016) described and presented the outcome of this survey in detail, and made recommendations for an improved system for the GSL.

As a precursor to an analysis of the survey, the current definitions, associated terminology and areas of CPD activity were recorded across many professions. From the large amount of information available on the professional bodies' websites, it is evident that there is a wide lack of comprehension of what CPD is – and is all about. In order to bring more light to bear on this subject, a comprehensive summary of all facets of CPD has been assembled to place into context the findings of the subsequent survey. This summary is given as Section 2 of this document.

The survey looked at the websites of some 40 professional bodies across the English-speaking world, including GSL (for CGeol), the Science Council (for CSci) and the European Federation of Geologists (for EurGeol) to ascertain such details of these bodies' CPD systems as are publicly visible on their websites. Without exception, all of the professional bodies required or recommended that their members undertake CPD, to the extent that a simple definition of a professional person may be stated as someone who is obliged to perform CPD as part of their work-related activities. In reviewing the range of CPD requirements of the various bodies, an analysis was conducted of their major features, including what was liked and disliked about them and potential lessons that could be learned, with a view to recommending a system for GSL to bring it in line with current best practice and to replace its existing system.

The review found a widespread trend towards taking the online recording of CPD to the next level. This is achieved by having a web-based system that is usable by smart devices (internet-connected mobile phones, tablets, etc) as well as by conventional personal computers connected to the internet, to plan and record CPD and to store associated evidence of CPD activities as they are completed. The introduction of a greatly improved web-based CPD system for GSL Fellows is recommended in order to encourage the prompt recording of their CPD activities. This takes into account the requirement for a custom-built, user-friendly yet comprehensive CPD recording tool which works across a range of platforms.

The proposed new and improved CPD System for GSL includes a redefinition of, and increase in, what may be regarded as legitimate CPD activities (see sub-section 2.5 **Doing CPD – how to**). The existing recursive **plan** → **act** → **reflect** cycle of performing CPD has been enhanced and reinforced, while the weighted points-based measurement of CPD has been abandoned in favour of a simple unweighted number of hours. The minimum number of hours of CPD expected of Chartered Fellows in full-time employment has been put at 90 hours per year. It is noteworthy that, under the old, weighted points-based system, the minimum number of hours to gain the necessary points was between 165 and 380h pa.

2 CPD – A Review

This section reassesses what CPD is or should be, and sets out why it has now become crucial for all active professionals.

2.1 About CPD – what?

The Society's definition of Continuing Professional Development (or CPD) is:

'The systematic maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for carrying out professional and technical duties throughout a working life. (The Geological Society of London, 2017)

This definition is explained and expanded on the Society's website as:

'An organised way for professional geologists to maintain and develop the standards of technical and professional competence required for their work. As well as

This document provides supplementary information to the article that was published in the February 2017 issue of *Geoscientist*. Other documents relating to the 2017 CPD system and available on the website include:

- revised Regulation R/FP/13 ~ CPD;
- a short PowerPoint presentation, as given to all Regional Groups early in 2017;
- a new Fellows' CPD Log Book that supersedes the previous version;
- guidance on completing a compliant CPD record;
- a standalone Mind Map of CPD Activities;
- information on the audit process; and
- various notes and reminders online and in the Chartered Fellows' Newsletter.

broadening their knowledge, CPD gives assurance to their employers, and to society in general, that they are professionally competent.'

See <http://www.geolsoc.org.uk/Membership/CPD/About-the-CPD-Scheme>

Research on global CPD practices reveals that there is a wide range of definitions of CPD across the professional bodies surveyed, but that of the Geological Society given above, is thought to be as good as any other, so is recommended for retention.

The term refers to a life-long, structured approach throughout one's career to the systematic process of maintaining and developing professional competence, creativity and innovation. A vital component of this process includes tracking and documenting the skills, knowledge and experience that professionals gain whether formally, or informally and self-directed. CPD can involve any relevant learning activity beyond any initial academic training. It is a commitment to lifelong learning, that is invaluable to all people across every segment of society.

CPD obligations are now common to most professions across the world. To justify the name, CPD needs:

- to be a documented process;
- to be self-directed: driven by the professional needs of the individual, not those of his or her employer;
- to focus on learning from experience, reflection and review;
- to help the individual to set development goals and objectives; and
- to include both formal and informal learning.

After www.jobs.ac.uk/careers-advice/managing-your-career/1318/what-is-continuing-professional-development-cpd

2.2 About CPD – why?

The importance and awareness of CPD has rapidly increased in recent years as professional and industry standards, regulations, technological changes and consumer needs continue to develop. Thus, it is no longer an optional extra to be undertaken according to the random needs or wishes of the individual or to meet some ill-defined, short-term organisational requirements. Planned and structured CPD is now vital for survival and prosperity in an increasingly litigious society and it has become particularly important to undertake high quality CPD in today's fast moving technological world, where knowledge is the key to success and the pace of change can soon make previous learning out-of-date.

There is now an increasing expectation that professionals should undertake CPD, regardless of their role, industrial sector or level of responsibility. Employers, professional bodies and academic institutions look for individuals to complete structured learning as part of their career development and to maintain their professional competence.

The increasing professional requirements of many jobs in response to changes in legislation, consumer needs, and general socioeconomic trends in recent decades has resulted in the growth of professional bodies and associations representing industries and job functions. It has been estimated that there are now over 1000 professional and scientific institutions, societies and bodies across the UK, of which over 50% require their members (at about 2010) to engage in Continuing Professional Development – and this percentage is continually rising. It is now widely accepted that working people cannot be called a professional unless they engage in regular meaningful CPD. Effectively, this means that all practising geologists (and all other professionals) owe a duty of care to their client to keep up to date with current knowledge and best practice – no excuses!

Undertaking CPD activities ensures that both academic and practical qualifications do not become outdated or obsolete, hence the importance of CPD in keeping professionals updated with relevant training, information, skills and knowledge so that they remain competent throughout their career. This continuous learning also helps to improve an industry as a whole. Performing effective CPD is a win-win for the individual, his or her clients, employer and profession, and the nation.

The Leitch (2006) and McCleod (2009) reports both identified skills gaps and shortages across the UK and further highlighted the need for individuals to 'up-skill' or 're-skill' continually, irrespective of occupation, age or educational level. This need has also fuelled requirements for people to undertake CPD.

These reports showed that the enhancement of skills and knowledge through CPD was critically important in retaining a competitive edge when operating in global markets. Members of professional bodies, associations and institutions are expected to undertake CPD as a duty of membership

After <http://www.cpduk.co.uk/index.php/cpd-background>).

Put simply, it is your career, and CPD helps you to realise your full professional potential and to maximise your professional value – to your employer and your clients.

2.3 About CPD – who?

All professional people are now obliged to undertake CPD in some form. Increasingly, employers are expecting all staff to have personal development plans (PDP) and career aspiration plans (CAP). Continuing professional development is a duty of membership of most professional bodies. An estimated 4m+ professionals working in all sections of UK society are members of one or more of the numerous professional bodies that require their members to undertake CPD – and this has become a global movement.

2.4 About CPD – the benefits

Individuals benefit from CPD by regularly focusing on how they can become a more competent working professional. Regularly updating knowledge and skills helps them to remain competent and effective within their role. Undertaking training and learning increases the individual's confidence and overall capability. CPD is generally based around personal requirements to complement career aspirations and it enables a positive adaptation to changes in work/industry requirements. Planning CPD helps the working professional to be more efficient with time, while recording CPD properly provides evidence of professional development. Such records are useful for supervision and appraisal meetings. Both prospective employers and, increasingly, clients are requesting evidence of current and ongoing CPD.

Professional organisations also benefit. Providing CPD enables the organisation to become a knowledge bank to their key stakeholders. CPD accredited training courses, workshops and events help professionals to use the learning time towards their individual CPD requirements, ensuring that they are kept informed, up-skilled and remain competent in the face of constantly changing best practice.

See <http://www.cpduk.co.uk/>

2.5 Doing CPD – how to

While very nearly all professionals undertake CPD, this is often on a casual basis, without any deliberate planning, recording of activities, or conscious reflection. This unsystematic approach is very inefficient and does not best aid in the achievement of career goals. Therefore, whatever its purpose or nature, learning through CPD should be reflective and should relate to specific objectives even if these are only to maintain professional competence. A regularly reviewed development plan facilitates learning, although there will always be a place for opportunistic and unplanned activities. Geologists should record both their CPD activities and what they have learned or achieved through them, and relate this to any planned objectives. This outcome-based approach is more appropriate to professional learning than relying solely on quantitative measures such as hours or points.

There are no fixed or standard approaches to CPD training and learning, but the outcomes should always be clearly apparent, applicable and relevant to the individual. CPD combines different methodologies to learning, all being focused for an individual to improve and have effective professional development. Professionals should maintain a CPD log of their learning and update it with the details of each CPD event.

CPD is a personal commitment and so each individual should determine what they wish to learn. The great majority of people undertake CPD on technical and business related issues that have a day-to-day bearing on their work. Consequently, CPD is perceived as highly pragmatic and relevant. It must be generic and educational, thus specific brand-promoting materials without any generic technical content are not suitable for CPD purposes.

Nearly all of the professional bodies that require their membership to undertake Continuing professional development prefer or insist that the annual effort is spread across a number of activity areas. CPD is highly personal to Individuals and should reflect what they aspire to achieve in terms of their career development. Therefore, they should analyse and select what it is they need to learn or improve in order to achieve their career goals. In doing so, they should appreciate that different people learn in different ways.

Confucius, ca 500 BCE, is reputed to have two relevant sayings in this context:

'By three methods we may learn wisdom:

First, by reflection, which is noblest;

Second, by imitation, which is easiest; and

Third by experience, which is the bitterest.'

Tell me, and I will forget.

Show me, and I may remember.

Involve me, and I will understand

Therein reside sound reasons for diversifying both the content of CPD and the type of learning undertaken in doing it.

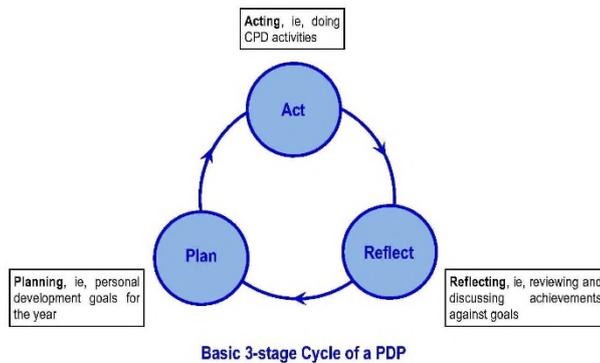


Fig 1 ~ Basic 3-Stage Cycle of a PDP

The **act** stage must include **recording** the details of what was done, because without it, the action is a waste of effort. Similarly, the **reflect** stage includes the preceding **evaluation** of the **act** event, otherwise it is not possible to reflect on what was learnt and how valuable and apposite the learning event was to the **plan**. It has been found that the **evaluation** is best done (and recorded) as soon as possible after the **act** event, but the subsequent **reflect** can be carried out towards the end of the cycle. This sequence is even more time-critical for a Career Aspiration Plan (CAP) cycle.

A number of other cycles of more detail and complexity have been developed by researchers on the subject, especially Gibbs (1988) and Kolb (1984), but they are all condensable to the simplest form shown in **fig 1**, above (after Greenaway, 2002).

Learning that comes about through reflection on experiences is termed Experiential Learning (Dewey, 1938). This is also known as informal education and includes learning that is organised by learners themselves. Experiential learning cycles are models for the process of learning and they treat the learner's subjective experience as of critical importance in the learning process. Experiential learning cycles propose an iterative series of processes which underlies learning. Depending on the model, there is anywhere between one stage (experience alone) through to six stages of learning to be considered. Experiential learning cycles are commonly used to help structure experience-based training and education programs

See <http://www.wilderdom.com/experiential/elc/ExperientialLearningCycle.htm>

However, there is another layer. CPD is normally conducted on an annual or bi-annual Personal Development Plan, or PDP cycle. But to address the longer-term aspirations and aims of career progression, another cycle is often superimposed. This is known as a Career Aspiration Plan, CAP, or a Development Action Plan, DAP, and is conducted on a 3 to 5-year cycle.

It, too, can be simplified to a 3-stage cycle of **plan** → **act** → **reflect**, where the **act** (a learning event) in this cycle can be considered to be the entire annual PDP cycle, as depicted in **fig 2**.

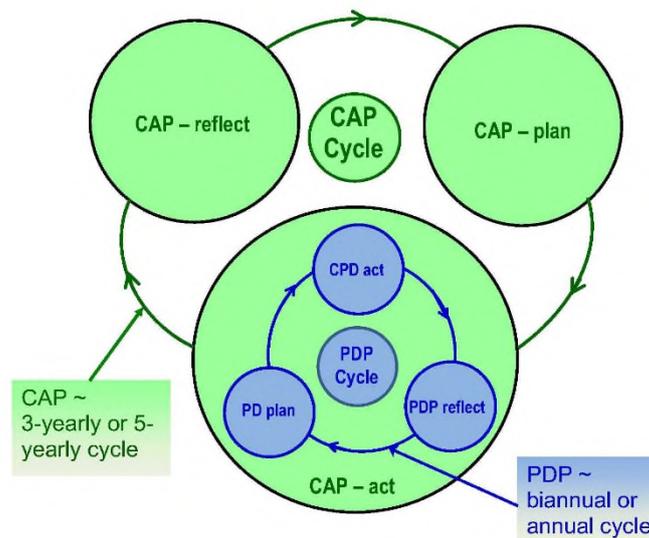


Fig 2 ~ Combined CAP and PDP Reflective Cycles

Reflection is critical in obtaining value from the development activities that are undertaken. A programme of CPD activities should be directed towards achieving the selected development goals, consequently it is important to assess the extent to which the activities have contributed to building the skill-base and, or knowledge-base that lead to the improvement of professional output to end users or recipients.

2.6 Doing CPD – when to

Every opportunity should be grasped to participate in a learning event if it fits into the PD or CA plans, employer and other commitments permitting. It is important to recognise the fallacy of thinking that CPD should only be undertaken during working hours. Put another way, 'it is your career, take ownership of enhancing it and do your CPD irrespective of whether it is during or outside working hours. It should be viewed as a personal investment in your own future success.' Doing CPD needs to become embedded in, and an integral part of, professional life, such that it and daily practice become inseparable.

2.7 Doing CPD – what to

Again, this will depend on an individual's job and their personal circumstances and professional ambitions, but in simple terms the answer is anything that adds to their personal store of relevant skills, knowledge and experience is deemed to constitute CPD.

Geologists are employed in a very varied range of jobs and at all levels of responsibility and it is recognised that this will be reflected in their continuing learning needs which will be equally varied. Therefore, the range of subjects that could, in principle, be included in a CPD programme is almost limitless. However, it is recommended that geologists may need to undertake CPD in the following general areas, in order to develop their expertise on a broad front:

- a) Developing technical knowledge, experience and skills in their current field.
- b) Broadening technical knowledge, experience and skills into fields parallel to their own, thus enabling them to move into another job should the desire, need or opportunity arise.
- c) Acquisition of non-technical knowledge, experience and skills, such as: Business practice; Management techniques; Communication and presentational skills; Legal aspects (Health & Safety, Environmental, Employment); Finance; Languages, etc, thus preparing them to assume wider or greater responsibilities when the opportunities arise.

Fundamentally, what counts as CPD comprises *any* activity that develops one's work-related knowledge and skills. CPD activities should range from formal learning, like attending conferences, courses, lectures, etc, through to informal, like reading relevant textbooks and journals. What must be done is not prescribed; it is for the individual to decide what they need to do. If in doubt about whether an activity counts towards CPD, consider how it benefits one's PDP and, or, CAP. If enhanced skills or knowledge relevant to one's work and, or, career can be demonstrated, then it is admissible.

It has been claimed that possibly the most effective learning opportunity is organised support at work, the support being provided by colleagues or mentors being significantly more effective than that provided by an

individual's line manager. The style of support is also crucial; solving problems and meeting challenges as part of a cohesive team is the most effective. Work experience, whether within a structured and regulated situation or requiring significant innovation, is also an extremely effective way of achieving CPD goals. Informal discussions are very useful too, especially when conducted with subject specialists or work colleagues.

Interestingly, those activities that people most often associate with CPD, *ie*, attendance on formal short academic and training courses and postgraduate programmes, are not considered by some authorities to be as effective as the activities mentioned in the previous paragraph.

See <http://www.imarest.org/membership/membership-registration/record-your-professional-development/cpd-resources/174-cpdguideformembers/file>

Good CPD, therefore, takes a variety of differing forms. At its heart is on-the-job learning through the challenges and opportunities of working life, and interaction with others (*eg*, colleagues, clients, suppliers) including professionals from other disciplines. However, this may be supplemented by structured activities such as courses, distance learning programmes, private study, preparation of papers and presentations, mentoring and being mentored, involvement in professional body activities, or relevant voluntary work.

An often-overlooked aspect of CPD activity is that which is unplanned or opportunistic. For example, a lecture or course is announced that will provide a significant learning opportunity for an individual who, at the time of planning their CPD for the forthcoming period, was unaware that the lecture would take place. This opportunistic activity is applicable to all stages of professional development, including those who are retired, *ie*, no longer professionally active in paid employment, yet wish to retain their Chartership status, which requires keeping their CPD up to date. However, such unplanned CPD opportunities should not be relied on, but should be taken as a bonus to planned CPD.

In order to provide more specific advice on the range of CPD activities in which professional geologists might engage, a Mind Map has been developed specifically for this review paper. It is presented as **fig 3**, below, and comprises the six main categories of CPD. These have been further subdivided into over 70 activities spread across the whole range of categories. It is to be noted that the activities shown on the mind map are not exhaustive – inevitably there will be other activities specific to the various specialities of geological practice. In presenting this Mind Map, it should be appreciated that because an attempt is being made to classify and group a wide range of diverse things, it is necessarily an artificial and imperfect grouping; there are other equally valid ways of 'slicing the cake'.

2.8 Doing CPD – whether to

Rules on performing CPD have been steadily tightening in all professional areas over the last few years, but the range still varies from the very slack to the totally rigid:

- optional (very few professional bodies remain in this group) – not applicable to any GSL Fellows
- advisory for non-chartered members and necessary for senior and chartered members (also very few bodies remain in this group) – currently applicable only to non-chartered GSL Fellows
- mandatory for all professionally active members, whether chartered or not, but their CPD record is not necessarily audited every year (probably most bodies are currently in this group) – applicable to all CGeol Fellows
- compulsory, where their membership of their professional body and, or, licence to practice depends on satisfactory evidence of adequate CPD for the previous year, – to be applicable to all CSci and EurGeol Fellows.

2.9 Doing CPD – where to

Where to do CPD is, literally, anywhere that the CPD activity takes place. Self-evidently, for those in work, the majority may be in or connected to the workplace, although it can be done in the home as self-directed study, or as elsewhere, such as at professional meetings, courses, conferences and project team meeting venues.

2.10 Doing CPD – how much to

There is no simple answer to this. In principle, it varies from one person to another. The demands of an individual's job and the extent of their personal ambition will determine how much they should do. Always remember that quality is much more important than quantity. The most important aspect of CPD is the amount of knowledge and skill that is acquired, *ie*, the learning outcome, rather than the number of hours of study undertaken, *ie*, the input.

If sufficiently high standards of professional competence are to be maintained to retain employability, it will be necessary to undertake significant CPD. However, if all of the activities, particularly at work and in the form of private study that increase or add value to knowledge, skills and experience are considered, it will be realised that quite substantial amounts are readily achieved.

2.11 Doing CPD – measuring

Well over 450 professional bodies within the UK oblige their members to complete a specified number of CPD hours. The majority of these bodies require their members to record their continuing professional development efforts on the basis of an annual number of hours. These targets are defined by the accrual of CPD hours through on- or off-the-job training, seminars and workshops, events and conferences as well as other structured forms of CPD learning. These CPD hours are sometimes converted to points, units or credits. The professional bodies expect their members to allocate the hours / points / credits, based on the learning objectives achieved.

Until 2017, GSL's CPD has been 'measured' in points, where each point is gained for one or more hours of a CPD event; the number of hours needed for one point depends on the type of activity being undertaken. This variable, or weighted, points-based system results in a confusingly complicated method of measuring the value of CPD.

With weighted points-based systems some CPD activities are perceived to be 'more valuable' than others which can lead to a preponderance of time being spent in a single activity area rather than a more desirable spread of learning methods and areas. But recent research and thinking has identified this approach as being wholly erroneous and biased. As an example, a one-day seminar on a specific subject may be of immense value to a younger professional to whom the subject matter is entirely new, but rather less beneficial to another with rather more experience of the subject but who is, perhaps, not entirely up to date but is using it to update with current thinking in the topic – in other words, one size does not fit all.

A minority of bodies, especially those in the medical sciences require their members to seek CPD on a range of core subjects. In a similar if reduced fashion, some professional institutions in the construction sector require regular updating of knowledge in health and safety matters, in addition to which the member is free to tailor the rest of the CPD learning to his or her own needs and personal development plan. In other words, there can compulsory and optional elements comprising the overall CPD each year.

However, the majority of bodies allow their members to select subjects of specific relevance to them as individuals. These people assess for themselves the learning value derived from each CPD event they complete and allocate to it a suitable number of hours in their CPD record. In this way CPD can be made to fit better to each individual's need.

2.12 Doing CPD – value

Until recently, the main emphasis in CPD has been on *input* measured in terms of points or hours spent doing it. However, it is now increasingly accepted that what is more important, is the *output* in terms of learning and competence achieved as a result of effective CPD. Professional bodies, as well as education and training establishments, employers' organisations and even trade unions, are beginning to recognise the need to find effective ways of measuring this learning and competence in a form acceptable to their members.

See www.cpdinstitute.org

As with everything else that they deal with professionally, it is a given that scientific and engineering bodies will want to try and measure CPD quantitatively and record it in an objective and verifiable way. This approach may also be adopted by others wishing to be viewed as similarly objective. Generally speaking, though, it is considered difficult and not necessarily equable to place a numerical value on the quality of CPD, (sub-section 2.11, above). One possible approach could be to assess in detail at the PDP and CAP planning stages precisely what professional learning progress is desired during the period or cycle under consideration and, so long as the goal has been achieved within the specified time, irrespective of the number of hours or events undertaken, the CPD will be deemed to have been successfully completed.

This last approach is not practicable for most busy professional people unless they are in the fortunate position of benefitting from having a mentor. Consequently, it remains necessary, at the present time, to quantify the input or amount of CPD performed, but perhaps with the member factoring the hours allotted to a CPD event in an objective way to suit their own development goals. It should be noted that a development goal must not be to perform and record as many hours per year as possible, but instead, to do at least the necessary CPD to achieve each cycle's planned goals.

2.13 Doing CPD – for those not in work

There are a number of situations when a professional may not be working over a prolonged period, such as parental leave, redundancy, prolonged illness or retirement. In these circumstances, some professional bodies allow a 'sabbatical leave' from doing CPD; others allow either a suspension or a reduced requirement with later catch-up; while yet a few others require a continuation of full CPD.

In the first three situations, when a return to work is intended, it is considered highly desirable to maintain CPD, perhaps at a reduced scale wherever sensibly practicable. This readily demonstrates a commitment to career, although it is recognised that those on maternity leave and those suffering a prolonged debilitating illness may find this very difficult to achieve until shortly before or after they return to work. Some organisations, for example, the IGI, require extra CPD for those who are redundant, but expect to return to work.

2.14 Doing CPD – for those who are retired

In the case of retired Fellows, if they are still engaging in professional activities, even if on a *pro bono* basis, for charities, etc, (and this includes GSL Scrutineers and Mentors) and they wish to maintain their Chartership(s), then doing sufficient CPD remains a requirement, but perhaps without the overarching need to perform it in a strictly recursive manner (ie, **plan** → **act** → **reflect**).

Fellows who are fully retired from work and offer no professional services, whether *pro bono* or paid, that involves their former professional expertise, and are not GSL Scrutineers, do not have to do mandatory CPD, although they may elect to undertake CPD purely on a voluntary basis.

2.15 Doing CPD – motivating

Motivating some professionals to record and evaluate their CPD is a problem that is widely recognised across many professions, and is said to be particularly rife where there is a significant mature (ie, ageing) workforce. The underlying reason for not wanting to do the recording is, effectively, a blindness to the need for engaging with CPD; these people are essentially in denial. It is an affliction that is exhibited most frequently by older and some very senior practitioners. ("It was never needed when I was younger"; "I'm in a senior position, at the peak of my profession, why do I need to do it?"; "I'm far too busy to do CPD" – and other erroneous sentiments are heard). The point is that they all do it in one form or another but do not do the planning recording and evaluation hence they lose much of the benefit.

There does not appear to be a simple straightforward solution to ensuring that people complete their CPD records in a timely manner. Indeed, it is understood that the UK medical profession (GPs and Consultants) took over 12 years for all of their members to accept that CPD is crucial to good professional practice. Despite this progress, a dwindling few still try to fight the inevitable! And that is for one of the toughest organisations in making their members do sufficient CPD and of the right quality; to the extent that CPD is now compulsory for them, and a requirement for maintaining their licence to practice.

Perhaps the technique to adopt in encouraging a more active participation in doing CPD is that of the age-old carrot and stick approach, but with the emphasis on the 'carrot'. Possible encouragements to overcome this reluctance could include publicising more widely the detailed discussion given in this paper on the whys, wherefores and benefits of undertaking CPD, together with the recommendations for a user-friendly CPD management and recording system and an App to facilitate this. On the negative side, a 'stick' may be the removal of a member's name from their Chartership or EurGeol register(s) until sufficient evidence of CPD is produced.

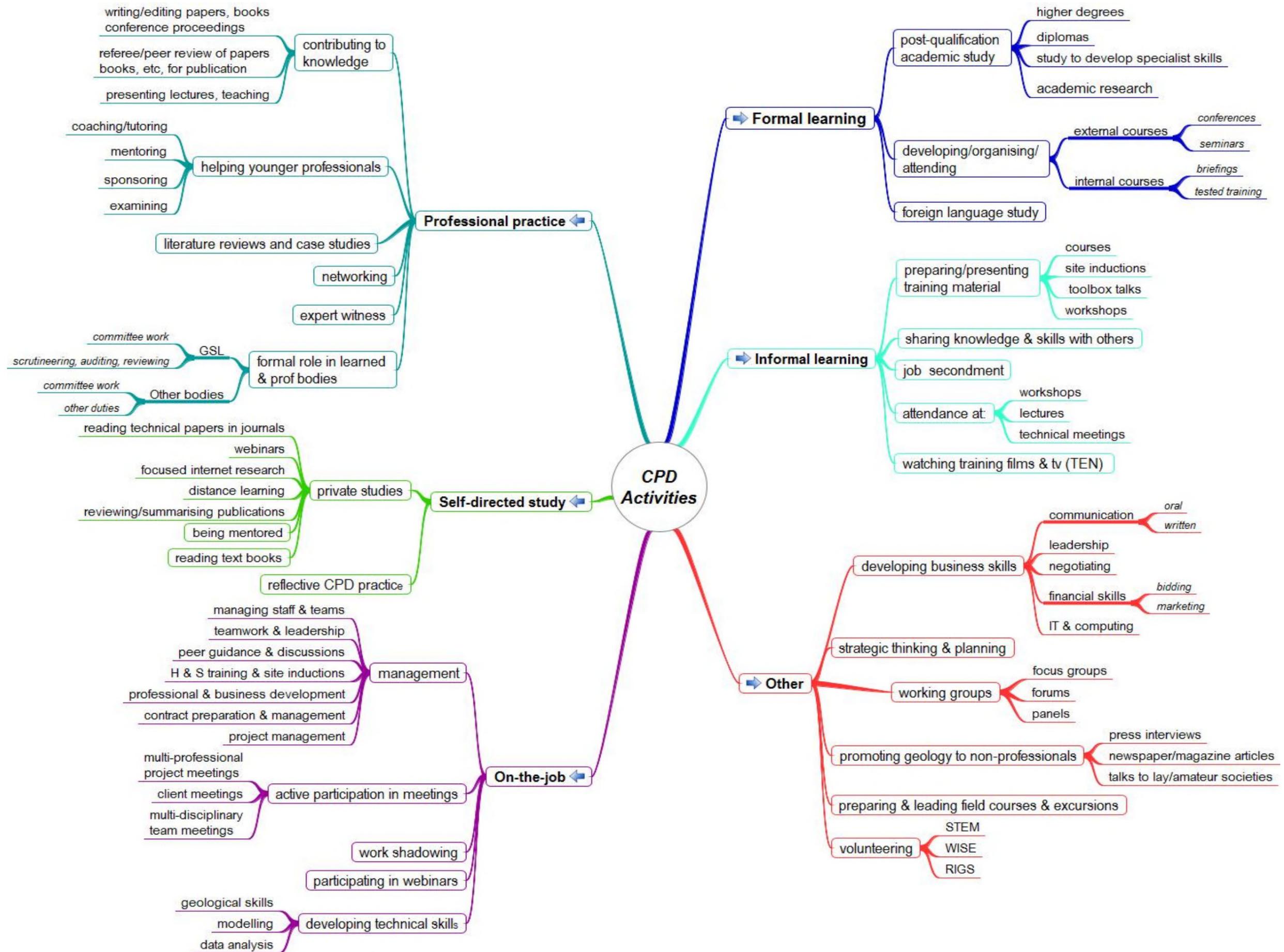


Fig 3 ~ CPD Activities Mind Map

3 Implementation of the New System

3.1 Items for immediate implementation in January 2017

- a new CPD system for Fellows of the Society will be available for use from January;
- CPD planning and recording to be required for all Chartered Fellows (*ie*, for Fellows with CGeol, CSci and EurGeol) and for Fellows aspiring to Chartership. Undertaking CPD is very strongly advised for other Fellows who are professionally active (Note: see the **Code of Professional Conduct, Regulation R/FP/07, §A.4 14**);
- CPD to be an annual recursive system of **plan** → **act** → **reflect**, set within a longer (3 to 5 yearly) Career Aspiration Plan cycle (see **fig 2 ~ Combined CAP and PDP Reflective Cycles** above);
- CPD is now measured in straight, *ie*, unweighted, hours;
- the minimum recorded CPD required is to be 90h pa for most Chartered Fellows in full time employment;
- a much wider range of CPD activities in different categories is recognised (see the **Mind Map, fig 3**, above);
- a minimum of 90 hours of CPD must be recorded in at least 3 different categories, with the following limits (for most Chartered Fellows, *ie*, those in full-time employment, but see **table 1**, below):
 - ◆ at least 60 hours of the CPD is to be focused on career development and work-associated skills enhancement, with
 - ◆ of these 60 hours, 30 hours must be spent in the On-the-job category (unless retired or not in work for any reason);
 - ◆ the 60 hours of CPD outside of the On-the-job category should be spread across at least two of the remaining 5 CPD categories.
- there is no upper limit to the amount of CPD that can be completed in any year, so long as at least the minimum amounts stated above have been met;
- time in excess of the minimum, but not exceeding 20h pa may, if so desired, be carried forward, and can be rolled from one CPD year or CAP period to the next; (see **Table 1** for minimum CPD requirements for Fellows in various states of employment)
- a major revision of GSL's on-line CPD recording system to make it more user friendly and to have increased functionality;
- a revision of GSL's website pages on CPD;
- a revision of Regulation R/FP/13 ~ CPD, to accommodate the proposed new system.

3.2 Items to be implemented later in 2017

- Introduction of the on-line recording system
- enhancement of the Society's My GSL part of the website to provide an electronic career portfolio of personal and professional data and records, to complement and supplement those for CPD;
- introduction of a first class online, cloud-based, Fellows' career resource that will:
 - ◆ provide a storage facility for all Fellows' career portfolios of personal and professional data and records;
 - ◆ aid the management of Fellows' electronic career portfolios;
 - ◆ assist with CPD performance and recording
- provision of a simple user-friendly web-based system through the Society's website suitable also for smart devices operating on a variety of platforms, to record and manage CPD, and that is enjoyable to use;

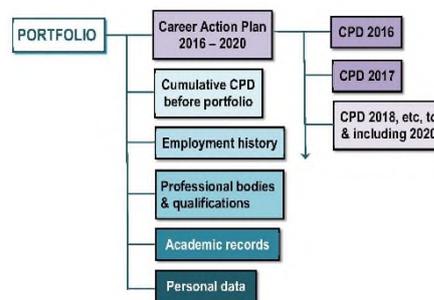


Fig 4 ~ Possible Portfolio Structure

Table 1 Minimum Amounts of Annual CPD for Chartered Fellows in Various States of Work

| Work Status of Fellow | Min annual CPD, total hr | Min total CPD hours in On-the-job learning | Max annual carry-over of excess hr |
|---|--------------------------|--|------------------------------------|
| Early career (pre-Charterhip) Fellows | ≥ 90 | 30 | 20 |
| All Fellows in full time employment, or on sabbatical leave | ≥ 90 | 30 | 20 |
| All Fellows in part time employment (eg, work sharing) | ≥ 50 | 16 | 10h |
| All Fellows on extended leave (carers, parental leave, prolonged illness, etc) (but with special pre-arranged GSL dispensation, 50% of these hours may, exceptionally be allowed) | ≥ 40 | 0 | 8h |
| Retired Fellows offering occasional professional services or who wish to retain their chartered status, and unemployed Fellows | ≥ 50 | 0 | 10h |
| Retired Fellows not offering professional services and who do not wish to retain their chartered status | Optional | 0 | — |

NOTES:

Once the minima total hours have been achieved, spread across On-the-job learning, plus at least 2 other main categories, any additional time can be spread as desired

4 GSL Website Recording for CPD

The management, administration, reporting and recording of CPD will be semi-automated via a user-friendly web-based system through the Society's website. The simpler and more user-friendly the proposed system, the more likely will be the routine use of it to record each CPD activity immediately (*ie*, not more than 24 hours) after it has taken place. The intended ease of use may also encourage those less IT-aware Fellows to record their CPD in a similarly prompt manner. The desirable key attributes and functions which have been identified to date are outlined in the lists below:

4.1 Key Attributes

- simple and quick to use
- user-friendly
- good navigation between screens;
- password-protected;
- comprehensive reporting capabilities;
- multi-platform, *ie*, usable by a variety of smart devices with different operating systems, as well as by computers, whether desktops or laptops;
- sync-able between devices and GSL central records, *ie*,
 - ◆ cloud-based on-line tool that can be accessed securely anywhere on any internet-connected device;
- records must be portable to and from other software, thus exportable to other organisations' CPD repositories, *eg*;
 - ◆ an industry standard word processor or spreadsheet recording system so that reports can be downloaded and used in other records;
- feature to allow Fellows to import their existing 'My GSL' CPD Records into their new e-portfolio;
- ability to upload CPD on the go, as soon an activity or event is completed;
- ability to work off-line with data saved locally and uploaded once connectivity is restored;
- in-built links to folders of evidence files, such as certificates, emails, etc.

4.2 General System Requirements

- members' e-portfolios, to hold all personal career/professional resources and CPD events, activities and records
- records held indefinitely (until membership ceases);
- ability to notify the user of connectivity errors;
- a simple to use broadcast functionality, which would allow administrators to send communications and promotional messages to all or specific groups of CPD users;
- notifications sent when planned CPD activities become due for completion;
- reminders sent as the annual CPD deadline approaches;
- user messages area which will show those user messages relevant to the status of their CPD;
- sync with users' Outlook or other appointments and task organiser for CPD diarised events and activities;
- an optional feature to enable the CPD recording system to open automatically at pre-set times and days, with a request to record recent CPD activity, if any; but also, to include the facility to switch on and off reminders at selected intervals;
- help function;
- FAQ pages;
- mechanism for feedback to the Society/Administrators.

4.3 Geological Society Specific CPD Web-based Recording System Requirements

- cyclical or recursive reflective learning approach with user-defined goals;
- generation and recording of 3- to 5-year recursive career aspiration plan (**CAP**);
- generation and recording of annual recursive personal development plan (**PDP**);
- dashboard showing goals and record of activities;
- evidence and reflection to be linked to PDP objectives, allowing CPD users to monitor progress towards meeting their objectives;
- submitted records can be viewed on smart devices as well as on a pc/laptop;
- submitted records can be edited within the reporting year; thereafter, they are locked, but can be copied;
- multi-lingual: English with an option to switch to Cantonese Chinese (eg, for GSL Hong Kong) and other languages in the future;
- resources page containing:
 - ◆ events diary – link to GSL seminars, webinars, accredited and endorsed courses, etc;
 - ◆ CPD portal to provide guidance and inspiration for CPD planning;
 - ◆ link/access to the new GSL CPD activity definitions;
 - ◆ links to relevant journals, articles and information sources;
 - ◆ possibly a networking site with on-line groups and 'ask an expert' facility;
- criteria differ depending on which Chartership (CSci or CGeol) requirements are being met;
- alerts about new items.

5 References

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This paper is based on drafts of several allied papers and reports to Council, by
JCS Talbot, CS Eccles and JW Gaskarth Feb 2016-Nov 2017