UNIVERSITY OF THE WEST OF ENGLAND

Foundation Degree in Paramedic Science

Practice Placement Educator's Handbook

PARAMEDIC SCIENCE PROGRAMME LEADER

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Foundation Degree in Paramedic Science

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Introduction to Being a Practice Placement Educator

The key to providing a valid placement experience is the knowledge, skills and enthusiasm of the Practice Placement Educator.

Welcome to the Paramedic Science Practice Placement Educator's (educator) Handbook.. It is hoped that this will be a valuable resource to help you in your role with pre-registration student paramedics.

The aim is to provide clear information that helps explain the educator's role and the students' practice placement documentation.

The role of educator is the absolute key to the student paramedic having a successful placement experience. For the student, their memories of the beginning of their paramedic career will be heavily populated with their experience of working with you and this experience will help shape the type of paramedic that they will become. *So, no pressure there then!*

Practitioners have high credibility with students and from you they learn not only facts and skills, but also attitudes, values and beliefs. All of us remember those practitioners who were significant role models to us. This is your chance to really influence the new practitioner.

The Benefits of being a Practice Placement Educator

- "It challenges you"
- "It can help your professional development – students question you!"
- "You get to share what you know"
- "You develop new skills that you can use in practice such as teaching, explaining and assessing"
- "It eventually impacts on benefiting client care as working with a student helps you reflect on your own practice"
- "The students can access up to date articles and share with you what they have done in their lectures"

- "We employed one of our ex-students. She remembered her placement and wanted to come back"
- "You influence and shape the type of professionals that are coming out [into practice]"
- "Students see things with fresh eyes and so notice things that you don't"
- "It helps to remind me of some of the things I thought were important in my profession"
- All quotes from placement educators (Sharp et al: 2006)

"It helps me to get more job satisfaction; I am seeing the role anew through the student's new, fresh and enthusiastic eyes."

The Paramedic Science Course

KEY POINTS

- 2 year programme
- 750 hours in placement per year
- Equates to 50% of the course
- Range of placements
- 40 weeks placement in total

The University of the West of England (UWE), in partnership with the Great Western Ambulance Service NHS Trust, is offering a two-year Foundation Degree in Paramedic Science. On successful completion of the course, students are awarded FdSc Paramedic Science, and are eligible to apply for registration with the Health Professions Council.

FIGURE 1: Student Paramedics participating in 'Operation Equinox', major incident exercise

Programme Aims

The Foundation Degree in Paramedic Science is a new exciting programme that has been developed to meet the increasing requirement for ambulance services to provide a wider range of treatment options and to broaden their role in the emergency and unplanned care environment. The programme is designed to provide the knowledge, skills and understanding which underpin the Paramedic role and to develop the adaptive problem-solving and decision-making skills required in practice.

Paramedics are professionals working in a highly physical and mentally demanding role. The recognition of the need to treat patients as quickly as possible following serious injury or medical emergency is widely accepted. However, the course also aims to enable the paramedic to treat and refer and to find, when appropriate, alternatives to hospital attendance. The course programme aims to provide the knowledge and skills needed to work autonomously as a paramedic or as a member of the team providing the accident and emergency services.

Practice Placements

A practice placement is where learning opportunities are available for the student to undertake practice under supervision.. A practice placement has a direct bearing on their ability to work effectively and integrate theory to practice. A placement educator will facilitate and assess the learning, enabling the achievement of required learning outcomes and competencies.

Professional practice placements account for precisely half of the programme and students will gain

Balance
50% theory
50% practice

experience in a variety of clinical settings. There are placements across Avon, Gloucestershire and Wiltshire in the settings of emergency and unplanned care. These include the Great Western Ambulance Service, emergency departments in most of the major hospitals, operating theatres, coronary care units, children's units, and community mental health and primary care teams.

The course is modular in structure. Each module contains elements designed to develop the knowledge, skills and attitudes students will require, in order to function effectively as paramedics. There is a balance of 50% practice and 50% theory throughout the course. Whilst in practice placement settings each student is allocated to a paramedic or other suitably qualified professional to act as their mentor.

FIGURE 2: Frenchay Emergency Department

Programme Structure

The Foundations of Paramedic Science Practice module runs throughout year 1 and provides a solid knowledge base for the more complex Paramedic Practice module which runs throughout year 2. Blocks of learning at the University alternate with practice placements throughout the programme.

1. Communication Skills
2. Exploring the Context of Health and Social Care
3. Concepts in Biological Sciences and Disease Processes for Paramedic Science
4. Foundations of Paramedic Practice
5. Clinical Theory for Paramedics 1

FIGURE.3: **First year modules** are all at certificate level. Each module is worth 20 credits with the exception of Biological Science, which is a double module worth 40 credits

6. Research Methods
7. Living and Working in a Diverse World
8. Pathophysiology for Paramedic Science
9. Paramedic Clinical Theory 2
10. Paramedic Practice
11. Physical Assessment and Clinical Reasoning

FIGURE.4: **Second year modules** are at Diploma level with the exception of Physical Assessment and Clinical Reasoning which is at Degree level. All are valued at 20 credits each.

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The Role of the Practice Placement Educator

In this chapter, we explore the role and responsibilities of the Practice Placement Educator

T**he Educator will :-**
- normally be a registered **paramedic** (may be another registered healthcare professional in non-paramedic placements)
- normally have **12 months post registration** experience
- have undergone appropriate development for the role
- possess a willingness to undertake the commitment of the PPEd role
- act in a **lead role** in the co-ordination of student teaching and assessing requirements
- have a good working knowledge of the student's **educational and clinical programme**
- understand the expected **learning outcomes** of the student being supported
- participate with the student in **reflective** activities
- understand what creates a **good learning environment** and strive to achieve this within the clinical area and the mentor-student relationship
- **facilitate** the student in the identification and achievement of their own outcomes for the placement

Guide the student towards experiences that will assist the achievement of outcomes

- ensure that the student has a satisfactory number of **supported hours** during a placement
- ensure adequate cover with an **associate PPEd** when unavailable
- **liaise** with the associate PPEds to ensure continuity and fairness in teaching

- ensure that a safe level of supervision is achieved, so that the student always works within the **HPC Code of Professional Conduct**
- meet with the student at regular intervals to **discuss progress**
- understand the **assessment tool** in use
- participate in the assessment process and have an understanding of a **shared responsibility for the evaluation of the student's clinical learning outcomes** and verification of the achievement of competencies
- contribute to a **supportive learning environment** and quality learning outcomes for students
- be **approachable, supportive and aware** of how students learn best
- have knowledge of the **student's programme of study**
- be willing to share their **knowledge of patient care**
- identify specific **learning opportunities** that are available within the placement area
- ensure that time is identified for **interviews** with students in order to assess learning needs and develop action plans when necessary
- **observe** students practicing newly learnt skills
- encourage the application of **enquiry-based learning** and problem-solving to situations, as well as giving factual information
- build into learning opportunities the chance to experience the skills and knowledge of **other specialist practitioners** such as ECPs
- provide time for reflection, **feedback** and monitoring of students' progress
- ensure that students have constructive feedback with suggestions on how to make further improvements to **promote progress**
- **seek evaluative feedback** from students at the end of their practice placement experience

The PPEd is a multi-faceted role in which they facilitate the student's attainment of the learning outcomes through assessment, planning, clinical support and role modelling.

Each student is required to have an educator in the clinical setting. It is understood that the educator may be unavailable at times due to leave, night duty or conflicting shift patterns. When this occurs an associate educator should normally be allocated to take over the mentoring responsibilities.

The educator is expected to facilitate the student's progress during the clinical placements by assisting the student to achieve outcomes relevant to that placement. The educator also has a joint role, with the university programme leader, in the verification of the student's competence and fulfilment of the requirements for progression.

The Placement Educator as Facilitator

The term facilitator comes from the Latin 'facilitas' meaning 'easiness', and the verb 'to facilitate' means 'to make easy, promote or help forward'

The educator facilitates the practice placement for the student. Facilitation is a means of teaching which has the following characteristics:-

- provides the environment for learning
- provides the resources for learning
- provides the opportunities for learning
- provides the opportunities for teaching
- removes obstacles to accessing placements
- encourages reflection
- encourages self-directed learning
- encourages participation
- keeps the student focussed
- provides the means for achievement of competency

The term facilitator comes from the Latin '*facilitas*' meaning 'easiness', and the verb 'to facilitate' means 'to make easy, promote or help forward'

The Placement Educator as Teacher

The placement educator's role as teacher is well defined by its derivation from the old English word, 'taecan', meaning to 'point-out' or to 'show'.

The placement educator teaches that most important part of the curriculum; establishing connections between learned theory and clinical practice. It is not enough just to teach a sequential technical skill; skills teaching needs to also encompass the following:-

- When the skill should be applied
- When the skill should not be applied
- Why the skill is needed. What rationale underpins its use
- How might the skill be adapted in differing scenarios
- Identifying links with other areas of practice
- What might the patient be feeling as a result
- How it links with the overall, holistic care of the patient
- It may identify a learning need

In practice, the educator should explore and develop this learned theory by questioning the student. Within the emergency environment, it may not be practical or ethical to do this at the time. It may be more appropriate to do this immediately after the call has been completed using the questions as a form of 'reflection-on-action' (Schon: 1983).

The Placement Educator as Assessor

There are clearly potential issues of conflict between your supporting role and assessing role. When providing feedback there is a fine-line between the negative and the positive. Perhaps the best way of looking at this is as *supportive assessing*.

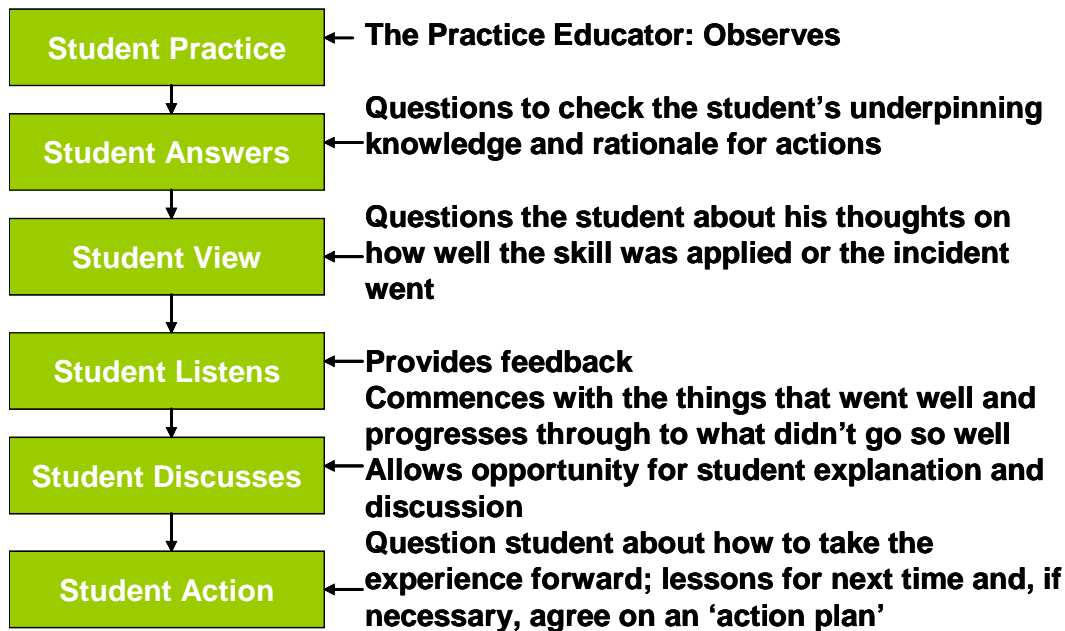|	
Student Practice	← **The Practice Educator: Observes**
↓	
Student Answers	← **Questions to check the student's underpinning knowledge and rationale for actions**
↓	
Student View	← **Questions the student about his thoughts on how well the skill was applied or the incident went**
↓	
Student Listens	← **Provides feedback** **Commences with the things that went well and progresses through to what didn't go so well**
↓	
Student Discusses	← **Allows opportunity for student explanation and discussion**
↓	
Student Action	← **Question student about how to take the experience forward; lessons for next time and, if necessary, agree on an 'action plan'**

FIGURE.5: **Feedback Sequence:** It can be seen that the feedback process facilitates 'reflection'

It is the job of the educator to emphasise the positive and facilitate action planning to manage the negative. Depending on how things went, it is important to keep the feedback proportionate, but not allow it to become disillusioning.
Assessment is a continuous process and in the final analysis a single incident should not be allowed to 'make or mar' a learner's reputation

Assessment is a continuous process of learning in which the learner is equally involved with their assessment. Within this process there is both formative and summative assessment.

Formative assessment is diagnostic in nature and is concerned with the development of the student, with identifying strengths and weaknesses, and with providing the student with feedback on their progress during the learning process.

Summative assessment is a final assessment that occurs at the end of an experience and is decision making in nature.

Further information on the educator's assessor role is given in the Documentation chapter.

FIGURE 6: The practice educator observes student practice

The Placement Educator as Role Model

The dictionary defines a role model as "a person whose behaviour in a particular role is imitated by others" (Webster's Medical Dictionary: 2008). It can be seen that this definition does not identify the type of behaviour to be imitated.

As soon as you put on the paramedic uniform you become a role model. It might be said that you have no choice about this. Your appearance, your bearing, your language, your intonation, your interpersonal skills and your clinical skills; all can be seen by your peers, patients, relatives, other health care and emergency care workers and student paramedics. The paramedic is in a high profile profession and every move is observable and therefore open to interpretation and criticism by others.

Does your practice stand up to scrutiny; imagine if you were to appear in a 'undercover' documentary about your profession; would you be proud of your actions or would you squirm with embarrassment?

Whilst you may have no choice about whether you are a role model; you do have a choice about the sort of role model you will be. Will you be positive or negative; constructive or destructive; only you can decide.

Role Model – How shall the student know us?	
Positive	Negative
Constructive	Destructive
Encouraging	Dismissive
Thoughtful	Thoughtless
Smart	Scruffy
Reserved	Gossipy
Proactive	Reactive
Open	Closed
Listener	Talker
Professional	Unprofessional

FIGURE 7: Role model choices

As paramedics, we are shaped by our experiences of working alongside others. These experiences are absorbed and inform our decisions about the way we apply our knowledge and skills.

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Student Responsibility

Students are advised about their conduct and responsibilities when going in to clinical placements. Below are extracts from the course handbook and practice placement documentation

S tudent responsibilities before the placement

- Contact the placement manager or Practice Placement Educator to introduce yourself, confirm the starting date and time, clarify the dress code and to discuss any concerns that you have relating to your practice learning.

- Ensure that you understand the specific expectations of your allocated practice placement. You will receive some guidance on this from your module leaders but will also need to be continuously aware of the learning outcomes contained in the Practice Assessment Document.

During the practice placement you must:

- act at all times in accordance with the Paramedic codes of professional practice. (For detail log on to the Health Professions Council website: http://www.hpc-org.uk)

- carry out your duties in a professional and ethical way,

- follow all Health and Safety instructions

- maintain confidentiality in regards to patients, clients and service users. Remember that you **MUST NOT** include any patient identifiable information or original Patient Report Forms in your portfolio

- identify suitable learning opportunities to complete your Practice Assessment Document

- ensure that any skills attempted are under the supervision of a skilled practitioner

- act within the limits of your knowledge, skills and experience and, if necessary, refer on to another professional

- discuss any difficulties that you have with your Practice Placement Educator and then, if necessary, the Course Leader

- adopt a questioning and reflective approach to your learning; to increase self-awareness, confidence and competence. Where appropriate give and receive feedback

- seek help from the faculty student advisers, if issues such as finance, accommodation or personal issues are impinging on your practice learning

- limit your work or stop practicing if your performance or judgement is affected by your health

- comply with the UWE sickness and absence policy and the placements reporting arrangements

FIGURE 8: The student should behave with integrity and be punctual, reliable, courteous and honest

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Documentation

As part of the first and second years, students are required to develop a portfolio of evidence towards the basic and advanced practice outcomes.

The development of this practice assessment document reflects the Health Professions Council Standards of Proficiency for Paramedics (2003), as identified in each individual element of practice. Each element also reflects the Joint Royal College Ambulance Liaison Committee (JRCALC) Clinical Practice Guidelines (2004) and the College of Paramedics (BPA) Curriculum Framework Document (2007). Any additional information /documents deemed relevant i.e. Department of Health and the Quality Assurance Agency have also been referenced, in order that students and practice placement educators can cross refer to each document, if required.

Clinical practice and the development of knowledge and skill are at the centre of this assessment document. This Practice Assessment Document records the student's progression, in placement throughout the programme. It also provides information concerning the roles and responsibilities in the assessment process. Further information is also provided within the Student and Mentor Handbooks.

Assessment Criteria

There are four ascending levels against which the student Paramedic should be assessed. Each element of practice has a target level to be achieved by the end of each year. See Appendix A for assessment matrix.
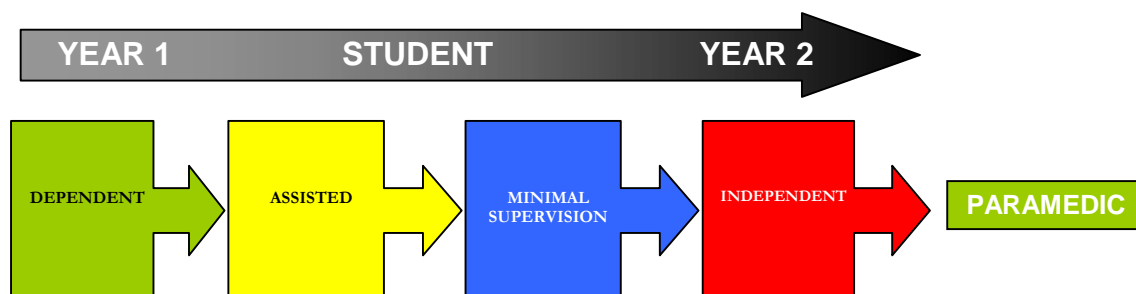

FIGURE 9: Criteria against which the paramedic will be assessed

Formative and Summative Assessment

- The student can be assessed formatively in any area, at any time.
- The student should have a minimum of one and a maximum of three **formative** assessments recorded for every element of practice
- In order to pass at the first attempt the student MUST have one **summative** assessment recorded for every element of practice by the end of the year
- The practice placement educator who undertakes the summative assessment must record the result in the record of achievement
- All the elements of practice must be assessed by the student and the practice placement educator, but the practice placement educator's decision will be considered as final
- At any time during the placement, the student and educator may record achievement of an element of practice. Students are expected to provide sufficient evidence of learning to enable effective dialogue to take place in relation to their capabilities. A portfolio of evidence of learning is important and should not just be a record of what has been undertaken (i.e. descriptive). Students **must also** present sufficient reflective written evidence in their portfolio for the educator to be able to make an assessment decision.

Assessing the elements of practice

- Each element of practice has a required level of competency. (See Figure 6 and Appendix A)
- In order to pass, the student must have achieved all the criteria within that particular required level of practice for each element
- The student must have achieved the level of 'INDEPENDENT' by the end of the programme.

KNOWLEDGE	PERFORMANCE	UNDERSTANDING
• Applies evidence based knowledge • Demonstrates awareness of alternatives • Sound rationale for actions • Makes judgements / decisions based on contemporary evidence	• Confident / safe / efficient • Works without direction / supervision • Able to prioritise • Able to adapt to the situation	• Conscious / deliberate planning • Actions/ interventions/ behaviour are appropriate to the client & situation • Gives coherent / appropriate information • Identifies & makes appropriate referrals

FIGURE 10: Criteria for the 'Independent' practitioner

Record of Progress Interviews

- The student must meet with their practice placement educator in order to ensure that the elements of practice are being achieved and to provide every opportunity for discussion and reflection
- Meeting dates must be negotiated and agreed within the first two days of each placement area. The content of these meetings and any additional meetings must be documented in the record of meetings.
- The formal record of progress interviews should take place 3 times a year; at the beginning; at the mid-point and again at the end of the year
- The **Record of Interview** (Appendix B) forms should be used to note discussions and progression, plus any additional learning achieved
- Students and clinical staff need to document discussions and use the records actively

- If at any point the practice placement educator is concerned that the student will not meet the required standard, then a **developmental action plan** (Appendix D) should be used to help the student achieve the identified elements of practice

Interpersonal Skills Profile

The Placement educator should complete the **interpersonal skills profile** (Appendix C) at the mid-point and at the end of each year at the same time as conducting the progression interviews. The PPEd should identify FIVE comments, which describe the interpersonal skills of the student.

The completion of these profiles requires the subjective opinion of the placement educator and therefore, should be accompanied by explanation to the student. Together with the student, they will also develop a personal action plan to address any identified issues.

Passing or Failing Practice

If the practice placement educator is concerned that the student may not achieve the elements of practice within the document, the programme leader must be contacted promptly in order to provide support.

If at any point the practice placement educator is concerned that the student will not meet the required standard, then a developmental action plan should be used to help the student achieve the identified elements of practice.

Record of Achievement

The student will **have passed** the practice element of the year if they have successfully achieved the summative assessments for ALL of the elements of practice stated within the practice assessment document. This decision will need to be recorded on the final **record of achievement** form (Appendix E).

If a student **has not passed** the practice assessment, it **must be** recorded in the record of achievement form and the content of the discussions with the student leading up to this decision must have been recorded in the record of meetings.

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Guide to Portfolio Assessment

"A portfolio is a private collection of evidence which demonstrates the continuing acquisition of skills, knowledge, attitudes and achievements. It is both retrospective and prospective, as well as reflecting the current state of development and activity of the individual."

Brown, R.A. (1995) Portfolio development and profiling

T he aim of this section is to assist placement educators to support students in practice with evidence collection for their portfolio, and to advise on the assessment of a student's portfolio of practice evidence.

A student's overall portfolio will demonstrate their ongoing learning throughout the course, in academic and practice learning environments as well as reflection by the student on their learning.

As a placement educator your role will focus on the practice assessment of the student

While in practice PPEds are assessing students against the HPC and College of Paramedics' standards of proficiency. These are national standards all student paramedics must achieve in practice during their course. The proficiencies are stated in the elements of practice record each student brings with them onto placement. The records are different for each year of the course, to enable the student to demonstrate their progression in ability and proficiency. The student should use the initial interview to identify the skills and learning they wish to achieve during the placement. Practice learning can then be planned and specific evidence identified. The student should ensure all learning opportunities are recorded. Towards the end of the placement a final interview will be conducted with the mentor who will review the quality of all evidence presented to that point and discuss their assessment decisions with the student and record these in the Elements of Practice record and the Record of Achievement.

In order to show their PPEd what knowledge skills and attitudes they have, the student is asked to collect evidence, referenced against the elements of practice... You will assess if this evidence is acceptable and meets the standards required for practice.

In order for you to be able to do this you need to be clear on what evidence can be collected, and how you check this against the elements of practice. This guide aims to help you with this aspect of assessment.

Paramedics practice in an environment of constant change

- Expanding role
- Increasing technology
- Advances in treatment and care
- Extending evidence base

It is the paramedic's responsibility to:

- Cope with these changes and their effects on practice
- Develop professional knowledge
- Develop professional expertise
- Develop professional competence

Professional paramedic practice is made up of many elements and these can be categorised in to the 'seen' and the 'unseen'. It can be likened to an iceberg:-

The seen is what we do in everyday practice. It is what which can be seen by others; patients, peers and other health care professionals. This is the 'tip of the iceberg'.

The unseen is the; education, critical thinking, problem solving and decision making processes that underpin everyday working practice. This is the larger part of the iceberg that lies beneath the surface.

FIGURE 11: Paramedic Practice

Not just the tip of the iceberg

The portfolio is a presentation of the student's practice. It should reflect the *whole* of the iceberg, not just the tip. It therefore should not be a just a description of what the student has done; it should show the underpinning knowledge, thought processes, attitudes and reflection.

In order to show their PPEd what knowledge skills and attitudes they have, the student is asked to collect evidence, referenced against the elements of practice. You will assess if this evidence is acceptable and meets the standards required for practice.

In order for you to be able to do this you need to be clear on what evidence can be collected, and how you check this against the elements of practice. This guide aims to help you with this aspect of assessment.
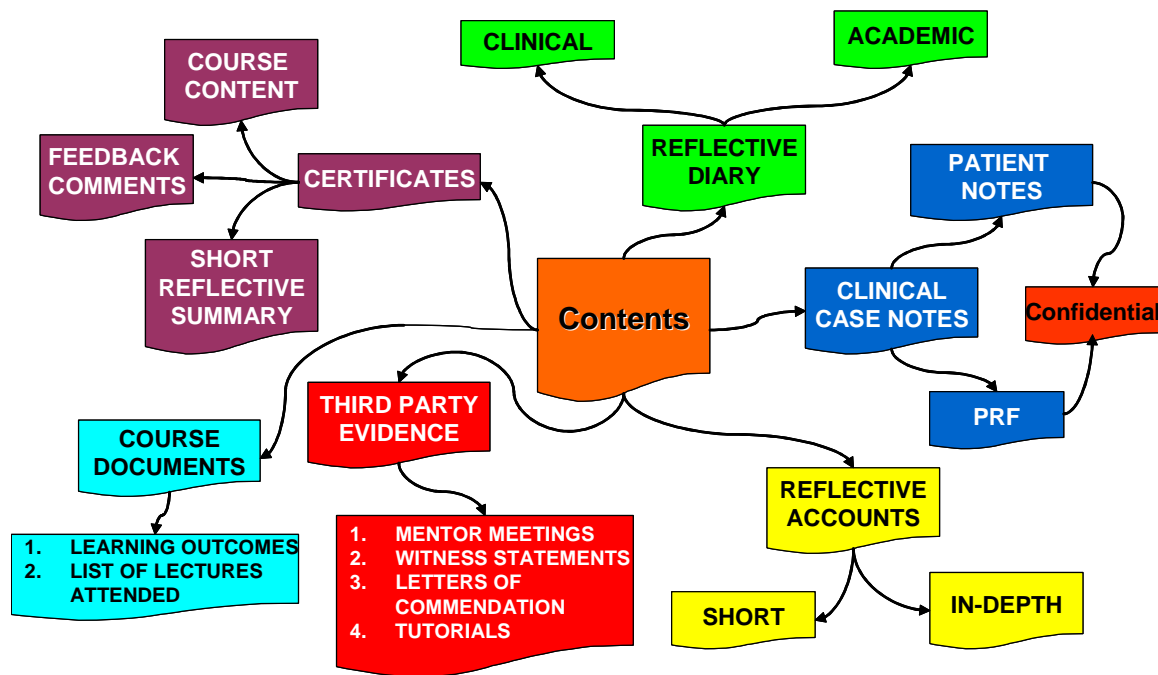
FIGURE 12: Sources of Evidence

What is acceptable evidence?

There are many ways a student can show their placement educator what they do and know in practice.

Direct observation (DO) is when a PPEd observes a student performing an activity / skill whilst under supervision. You would observe that the student is working to the correct and appropriate standard for their level of training. You may observe them on more than one occasion to ensure they consistently work at this level. Observations should take place as part of the normal working activity. Direct Observation is recorded in the student's assessment of practice record as **DO** and would be dated and then signed by you to verify the student had been seen delivering this area of [practice.

Questions and answer sessions (QA) can be used by the PPEd to assess a student's underpinning knowledge. This is usually done as you work alongside the student and ask them questions as you work about the activities and skills you observe. This would be recorded as **QA**, dated and then signed by you to verify the student had answered sufficiently to show their knowledge appropriate to their level of training. It may be useful to note the focus of the topic of questioning.

Observed practice statement (OP) can be obtained from any member of staff (other than the mentor) the student has worked with, as evidence of their observed performance and skills. The student **must** write the statement and the witness sign it. It should link directly to the elements of practice that the student is working towards.
Patients will not be approached to provide statements. However, should a letter of commendation or thanks be received, it may be included within the portfolio.

Reflective accounts. (RA) Following a particular incident or episode of learning / care delivery a student may write an account of this and use a model of reflection to analyse their learning experience. They may then present this as evidence. As the mentor assessing this you are checking the evidence is valid, that the incident or learning did occur during this

placement, and that the standards are met. They may ask you for some support with the structure of this account when using a reflective model.

Anonymised patient documentation. During care delivery students will complete documentation that they may wish to add as evidence of their achievement. Documentation **must be anonymous** and not identify the patient. Photocopies of documents or blank documents completed for simulated patients are acceptable.

> **IMPORTANT Students are advised that patient documentation needs to be anonymised prior to photocopying and that failure to maintain confidentiality is**

Other forms of acceptable evidence are;
- Reflective accounts of reading
- Reflective diary
- SWOT analyses
- Certificates of attendance

Academic assignments the students have completed can also be added to support their practice evidence. This is good practice as it links the relevant academic and practice learning and demonstrates the student is able to integrate the two and transfer skills and knowledge.

Students should be aiming for **quality of evidence not quantity** where possible, so an account that covers many standards is seen to be more valuable as evidence than many pieces of evidence that only meet one standard each.

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Reflective Writing and Critical Reading for Portfolios

"By three methods we may learn wisdom: first, by reflection, which is the noblest; second by imitation, which is the easiest; and third by experience, which is the bitterest (Confucius)

The most important aspect of developing your learning as a paramedic comes through reflection.

If you have responded to a 999 call and upon returning to your ambulance, after handing the patient over at hospital, thought 'did I do the right thing for that patient' or 'is there anything I could have done better': then you have engaged in reflective practice.

Reflection is about using questions to retell a story; it's about answering these questions critically and, in doing so, improving one's own clinical practice. Boud et al. (1998, 7) note, like Confucius, that experience alone is not sufficient for learning and poses the following questions: What is it that turns experience into learning? What specifically enables learners to gain the maximum benefit from the situations they find themselves in? How can they apply their experience in new contexts? Boud et al. (1998) suggest that structured reflection is the key to learning from experience, and also, that reflection can be very difficult; and for some, quite frightening:-
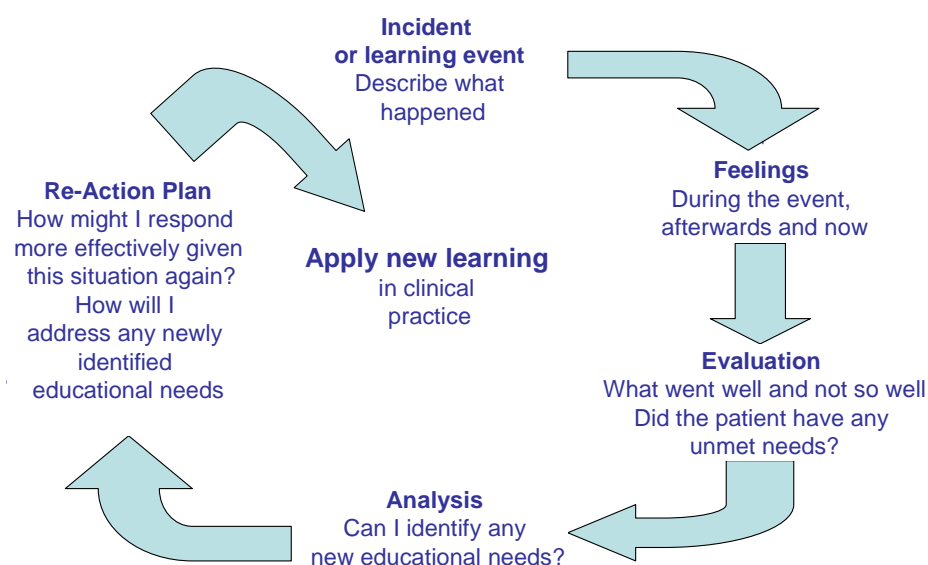

FIGURE 13: I.F.E.A.R. Reflective Framework (Smart: 2008) Adapted from Gibbs: 1988

One way of improving our written reflection and thereby our learning, is to use a story-telling framework. Below is a suggested reflective writing template, used by the students, which has been adapted from Gibb's (1988) learning cycle:-

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REFLECTIVE CASE STUDY TEMPLATE
(I.F.E.A.R.)

Incident:
Description of incident or learning event
Description of your part in it
You might want to focus on a description of an experience that seems significant in some way

Feelings:
What were your feelings during the incident/event?
What were your feelings immediately afterwards?
What made you feel this way?
How do I NOW feel about this experience?

Evaluation:
What went well?
What didn't go so well?
What were the consequences of my actions on the patient, others and myself?
Did the patient have any unmet needs (PUNs)?
To what extent did I act for the best and in tune with my values (ethics)?
Does this situation connect with any other similar experiences?

Analysis:
What did I learn from the incident or event?
What could I have done better?
Can I identify any practitioner (paramedic) educational needs (PENs)?

Re-action Plan:
How will I meet the PENs?
How might I respond more effectively given this situation again?
Do I need to chat to a colleague or mentor?
Do I need to research something?
Do I need to ask questions?
Do I need to read an article/book?
Do I need to attend a seminar/ session/course?

▼

Apply New Learning

FIGURE 14: Reflective case study template

Critical Reading Skills

There are 3,000 new medical papers published per day. Of these, only 45 are randomised control trials of new treatments. Over the last 30 years, published clinical trials have increased from 100 to 10,000 articles annually. The average university medical library will subscribe to around 2,300 journals.

How do we determine what we should read? How do we pick the wheat from all the chaff? READER is a suggested acronym to aid critical reading and to help in deciding what to read (Macauley: 1994):-

- **Relevance:** Does the article deal with your area of practice? This can usually be gleaned from the title or abstract. If it is not to do with your practice it is unlikely to change what you do.
- **Education:** This is used in the context of behaviour modification – would it change what you do. Again this will be clear in the title or summary
- **Applicability:** Can the research be done in the reader's practice? It may be relevant to your practice and it may be that you would change what you do, but it is

unachievable in your practice. For instance, a paper may look at the value of having a portable x-ray but for many services this would be impractical and unaffordable

- **Discrimination:** The message may be relevant, could change behaviour and be achievable, but is it valid? This really is down to the statistical quality of the paper.
- **Evaluation:** Okay, it's relevant, provokes change, is "do-able," and is epidemiologically sound, but what of the overall quality of the paper. Basically these systems score research very lowly if it is a descriptive case, higher if it is a trial, higher still if it is a large double-blind randomised control trial, and highest of all if it is a systematic review.
- **Reaction:** This is about how you should react to the paper. If it is a high quality, relevant, achievable change it should be shouted from the rooftops, meetings should be scheduled to promote it etc. If it is low quality, irrelevant, impossible to implement, and of no perceived benefit, *why did you read it in the first place???*

Reading is at the very centre of higher education, during their time at UWE the student will do a tremendous amount of it. The wider they read, the more they can reference: the more they read, the better informed they will become. Provided below is an example of a template used to record and reflect upon their reading:-

REFLECTION TEMPLATE FOR READING	
Topic: (Head injury, CHD etc.)	
Date Article Read:	
Name of Journal/Text Book:	
Title of Article/Chapter:	
Author:	
Why I chose to read this:	
Main points from my reading:	
Possible changes in my clinical practice that will result:	

FIGURE 15: Post-reading reflective framework

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NOTES PAGE

From Training to Education

Gary Smart. - Paramedic Science Programme Leader

"If you always do what you've always done, you'll always get what you've always had."

Hendricks-Thomas, J. Patterson, E. (1995:595)

The United Kingdom ambulance service of today is very different from that of just a few years ago. There has been a significant investment in the training and development of ambulance crews resulting in more effective patient care. It is an exciting time to become a paramedic. However, ambulance staff currently find themselves within a field of tension, on the one hand dominated by health care reforms and government targets, on the other by an ongoing debate about professional development, education and training.

In recent years, a consensus has developed that education and experience needs to be broadened and improved for those personnel involved in pre-hospital care and specifically for *paramedics*. (JRCALC: 2000). This essay will seek to explore the aetiology and implications of moving traditional paramedic training in to higher education. The focus is on describing the elements of a "discourse of change" (Davies: 1997). It can be identified that there are still significant challenges for the education of paramedics.

Traditional Training

Traditionally, ambulance students are employees of the ambulance service where they train and form an important part of that workforce during their training. They have been trained for qualification within a work-based, apprenticeship system. Training was preoccupied largely with behavioural objectives, outcomes and the achievement of *competency*. Much of the learning has been experiential, and this 'pattern recognition' will continue to remain important within a higher education model.

It can be identified that there are still significant challenges for the education of paramedics.

Ambulance paramedics are expected to treat a wide range of medical, surgical and obstetric emergencies, yet their traditional training (beyond their basic training and operational experience) is relatively modest, with around 300 hours initially followed by a 16-hour annual refresher course (JRCALC: 2000). There was a concern and acceptance that the desired depth of knowledge to become a paramedic may have been sacrificed for speed (Roberts: 1998). The Government target set in 1989, to provide in a relatively short length of time, one paramedic

on every front-line ambulance, being a significant factor limiting the length and depth of the training programme.

The volume of emergency calls attended by the ambulance service has been growing continuously since 1990, at around 5% a year. The Audit Commission identified in its influential report, *Life in the Fast Lane* (1998), that the service inevitably ended up taking the patients, resultant from these calls, into hospital. This might not always be the best disposal, the patient's own home sometimes being the most appropriate *(and cheapest)* setting for their treatment. This echoed a similar report, *Tackling NHS Emergency Admissions* (1997: NHS Conf. & R.C.O.P.) that suggested ambulance staff could help the NHS cope with high levels of emergency admissions by stabilising certain categories of patient at home. The Audit Commission report made the following recommendation: -

> **"Ambulance practice consists of specific skills and interventions that are taught on the basis that patients will normally be passed on to the care of other clinical professionals with the minimum of delay. Substantial changes will be necessary if [paramedics] are to take professional responsibility for decisions about how, where and how quickly a patient is to be treated. This level of decision making will involve a transition from training to education, emphasising not only techniques but clinical judgements based on a deeper understanding of the patient's condition. Possible ways to make such skills available to the ambulance service in the future include more extensive, degree-level paramedic education."** (Pg.72)

Recognising the need to look more comprehensively at the future of paramedic education, in January 2000, the Joint Royal Colleges Ambulance Liaison Committee (JRCALC) and the Ambulance Service Association (ASA) published a discussion document entitled, *The Future Role and Education of Paramedic Ambulance Service Personnel* in which they further highlighted the *perceived societal need* as;

> **"…a challenge for paramedics to gain adequate knowledge for an accurate assessment of the patient's condition, to acquire the skills for safe management, to maintain both, and to develop sound clinical judgement."** (Pg.3)

The paper offered an overview of the emerging concepts in relation to paramedic education and training for the United Kingdom ambulance services.

The report stated that [patients' needs could be best met by the development of degree educated paramedics. It explained that changes needed to be made, 'to reflect the important strands of Government's plans to modernise the National Health Service' (Pg.2). They list these *strands* and they identify that the need has arisen due to changes in the provision of primary care and the diminution of home visits by general practitioners.

A more sceptical analysis would determine that the role of the ambulance service has expanded because the public, no longer able to get their doctor out of hours, phone 999 for an ambulance instead. The patient is unnecessarily being transported to hospital.

Parallels can be drawn with the establishment in the U.K. of nurse education. In the 1980s, *Project 2000: a New Preparation for Practice* (UKCC: 1986) proposed radical changes to nurse education. Resulting from this, nursing students were given full student status, were not employed by the hospitals, receive a non-means tested grant and became supernumerary during clinical placements (Camiah: 1998). There was a paradigm change from training in nurse training schools to an education led programme within the

Which is the more appropriate for paramedics, to be trained or to be educated?

universities leading to the award of nursing diplomas and degrees. The ethos of *Project 2000* was to encourage the development of the "knowledgeable doer" (Harden: 1996).

The idea of reflective practice (Schon: 1987), now high on the paramedic agenda, is an important aspect of higher education, as is the notion of critical consciousness (Freire: 1972). For too long ambulance service training has been dominated and controlled by the paternalism of the medical and managerial professions. An education that raises consciousness is, self-evidently, emancipatory and leads to the paramedic taking ownership of the professions direction and agenda. Freire (1972) has described a problem solving education in which students will develop their power to perceive critically (and to transform) the way they exist within the structure.

Taking Healthcare to the Patient

The Ambulance Services Review 'Taking Healthcare to the Patient', June 2005, makes the following recommendations:-

> **"The training of ambulance clinicians and call handlers should have greater commonality with that of other health professionals and their career pathways should be integrated with the wider NHS, so that people undertaking similar tasks and gaining similar competencies have the opportunity to train and develop together.**
> **To aid integration, there should be a move to higher education delivered models of training and education for ambulance clinicians. Initial registration**

The guidance provides information on the transition to higher education for Paramedic pre-registration education and training. It describes the recommended education model and also provides guidance on commissioning and funding education programmes. The guidance has been designed for use by SHAs, PCTs and Ambulance Services.

This approach however, is not without its critics. Phillips (2000:6) decries the system of higher education for nurses for example, stating that it has turned the nursing profession into "quasi-doctors" who are now "too grand for caring".

> **"Nurses are not doctors because they do not have a medical qualification. If we are ill, we want to be diagnosed and treated by a doctor, not a nurse or some paramedic. Qualifications tell us that the individual is competent to do the job."**

She argues that nurses have become deskilled from altruistic caring and nursing skills and suggests the solution is to take nurse training out of the universities and return it to the hospitals.
Nurses and paramedics have long been diagnosing and treating patients through necessity. The hospital wards proliferate with experienced nurses advising junior doctors about the correct treatment and procedures. If a car is upside down in a water-filled ditch at 02.30 on a rain soaked morning, 30 miles from the nearest hospital, it will be a paramedic who attends the victim and who assesses and treats the injuries. There is seldom an appropriately qualified doctor in attendance. It is precisely because of these realities that paramedics need the best education available.
A more legitimate concern about moving paramedic training out of the training schools and into the higher education establishments would be the establishment of a theory-practice divide. This can be defined as a discrepancy between what students are taught in a classroom

setting - the theoretical aspects of pre-hospital care - and what they experience within the working environment (Corlett: 2000). If theory cannot be translated into practice then what is the value and quality of the educational experience?

Moving paramedic education completely away from its current skills based approach could significantly affect the competence and credibility of the practitioner. The tension that exists within the ambulance field is to balance a requirement to broaden professional development by encouraging a more thoughtful, reflective practice, with a command and control management system which requires clinical skills to be delivered with adherence to predetermined protocols. This change from training into a broader education model has been identified as one of the key developmental stages of a vocation becoming 'professionalised'. A profession is defined as an occupation "requiring specialised knowledge and intensive academic preparation" (Webster: 2000). The Cassell Concise English Dictionary (1994) expands the definition by describing it as "an occupation involving higher educational qualifications". Volmer and Mills (1966:7) have identified professionalisation as *moving towards* becoming a profession: -

The 5 characteristics of a profession are:-
- ☑ **A body of specialised knowledge**
- ☑ **Adherence to a code of ethics**
- ☑ **Registration to practice**
- ☑ **Continuous professional development**
- ☒ **Integration with higher education**

Paramedics can tick all but one of these boxes; it is the full integration in to higher education that will complete the transition in to a '*Profession*'

> **"…the dynamic process whereby many occupations can be observed to change crucial characteristics in the direction of a profession even though some may not move very far in this direction."**

It is clear that ambulance paramedics are developing through this process and moving towards higher professional status. Greenwood (1957) identified that professionals have a number of key identifiable 'traits'. These include; a body of theoretical knowledge, integration with higher education, adherence to a code of ethics, commitment to continuous development and registration to practice. Paramedics can tick all but one of these boxes; it is the full integration in to higher education that will complete their transition in to a 'profession'.

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References and Bibliography

Ambulance Service Association. (2000) *Code of Ethics and Professional Conduct for the Registered Paramedic.* ASA: London.

Audit Commission (1998) *A Life in the Fast Lane: value for money in emergency ambulance services.* Belmont Press UK.

Battersby, D. and Hodge, D. (1999) *A Survey of UK Ambulance Paramedics.* Ambulance UK, Vol.14, No.1, pp.12-15.

Brown, G. (1999) *Clinical Governance-A Quality Framework.* Ambulance UK, Vol.14, No.5, pp.311-312.

Brown, R.A. (1995) *Portfolio development and profiling* Quay Publishing: Lancaster:

Camiah, S. (1998) *Current educational reforms in Nursing in the U.K. and their impact on the role of nursing lecturers in practice: A Case Study Approach.* Nurse Education Today: No.18, pp.368-379.

Council for the Professions Supplementary to Medicine. (2000) *The Paramedics Board - An Introduction*, CPSM: London.

The Crown. (1999) *The Professions Supplementary to Medicine (Paramedics Board) Order of Council 1999.* Statutory Instrument 1999 no.1853. HMSO.

Cassell. (1994) *The Cassell Concise English Dictionary.* Cassell Publishing: London.

Davies, D. (1997) *From the Further Education Margins to the Higher Education Centre? Innovation in Continuing Education.* Education & Training. Vol.39, No.1.

Durkheim, E. (1895) *The Rules of Sociological Method.* Translated 1938.

Friedman, A. Hurran, N. & Durkin, C. (1999) *Good Practice in CPD Among UK Professional Associations.* Continuing Professional Development. Vol.2. No.2. Pp.52-70.

Freire, P. (1972) *Pedagogy of the Oppressed.* Penguin: Harmondsworth.

Gear, J., McIntosh, A & Squires, G. (1994) *Informal Learning in the Professions.* University of Hull, Department of Adult Education.

Gramsci, A. (1971) *Selection from the prison notebooks.* International: New York.

Greenwood, E. (1957) *Attributes of a Profession in Social Work.* Vol.2.

Hammersley, M. (1993) *Educational Research: Current Issues Volume 1.* Chapman Publishing: London.

Hendricks-Thomas, J. Patterson, E. (1995) *A Sharing In Critical Thought.* Journal of Advanced Nursing, Vol.22.

Holloway, D. *The Audit Commission, Managerialism and the Further Education Sector.* Journal of Vocational Education and Training. Vol.51, No.2, pp.229-243.

Jarvis, P. (1985) *The Sociology of Adult & Continuing Education.* Croom Helm: Kent.

Joint Royal Colleges Ambulance Liaison Committee. (2000) *The Future Role and Education of Paramedic Ambulance Personnel.* JRCALC.

Jones, M. (1997) *Thinking nursing.* In Thorne & Hayes (1997).

Knapper, C.K. & Cropley, A.J. (2000) *Lifelong Learning in Higher Education.* Kogan Page: London.

Lester, S. (1996) *Overcoming the Education-Training Divide: the case of professional development.* Redland Papers, Autumn 1996, pp.1-8.

Lester, S. (1999) *Professional bodies, CPD and informal learning: the case of conservation.* Continuing Professional Development, Vol.3, No.4, pp.110-121.

Madden, C.A. & Mitchell, V.A. (1993) *Professions, standards and competence: a survey of continuing education for the professions.* University of Bristol. Department for Continuing Education.

NHS Executive. (1998) *A First Class Service: Quality in the New NHS.* London: Department of Health.

NHS Confederation and the Royal College of Physicians. (1997) *Tackling NHS Emergency Admissions: Policy into Practice.* NHS Confederation.

Neal, M. & Morgan, J. (2000) *The Professionalisation of Everyone? A Comparative Study of the Development of Professions.* European Sociological Review: Vol. 16, No.1. pp 9-26.

Phillips, M. (2000) *Dumbing Down Medicine Will Be the Death Of Us.* Sunday Times: 09/04/00, pg.17.

Phillips, M. (2000) *How They Teach Nurses Not to Care.* Sunday Times, News Review: 27/02/00, pg.6.

Roberts, G. (1998) *Paramedics: Should we be creating a new profession?* Ambulance UK: 1998, No.13, pp 7-8.

Roberts, G. (2000) *Joint Royal Colleges Conference on Proposals for Practitioners in Emergency Care.* Ambulance UK: Vol.15, No.3.

Rogers, E.M. and Shoemaker, F.F. (1971) *Communicating Innovation.* Free Press: New York.

Sandelands, E. (1998) *Learning Strategies for Professional Advancement.* Continuing Professional Development: Issue 1, Part 1.

Schon, D.A. (1983) *The Reflective Practitioner: How professionals think in action.* Avebury: Aldershot.

Schon, D.A. (1987) *Educating the Reflective Practitioner.* Jossey Bass: London.

Sharp, P et al (2006) Mentoring. Oxford Brookes University Press, Oxford

Thorne, S. & Hayes, V. (Eds) (1997) *Nursing praxis: knowledge and action.* Sage: London.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting. (1986) *Project 2000: A New Preparation for Practice.* London: UKCC.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting. (1994) *The Future of Professional Practice.* London: UKCC.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting. (1999) *The Continuing Professional Development Standard.* London: UKCC.

Webster's Dictionary (2000) [On-line] www.m-w.com/home.html.

Vollmer, H.M. & Mills, D.L. (Eds) (1966) *Professionalisation.* Prentice Hall: New Jersey.

Williams, G, (1997) *Towards Lifelong Education: A new role for higher education institutions.* UNESCO: Paris.

Woodhead, C. (2000) *Degrees with a mark of failure.* Sunday Times (News Review): 13/08/00, pg.4.

Macauley. D (1994) READER: an acronym to aid critical reading by general practitioners. BJGP.

Greenhalgh. T (2001) How to Read a Paper. BMJ Books

Elements of Practice Criteria

Criteria Level	Knowledge / reasoning	Level of performance	Personal and professional awareness
Dependent (D)	• Lacks knowledge • No awareness of alternatives • Unable to explain / give reasons for actions	• Lacks accuracy & confidence • Needs continuous guidance & supervision • Poor organisation • No awareness of priorities	• Actions & behaviour are not modified to meet the needs of the client and situation • No meaningful explanations given • Lacks insight into personal and professional behaviour
Assisted (A)	• Knowledge is usually accurate • Little awareness of alternatives • Identifies reasons for actions	• Accurate performance but some lack of confidence & efficiency. • Requires frequent direction / supervision • Some awareness of priorities / requires prompting	• Recognises the need to modify actions / behaviour to the client and situation, but unable to do so in non-routine situations • Gives standard explanations / does not modify information
Minimal supervision (MS)	• Applies accurate knowledge to practice • Some awareness of alternatives • Beginning to make judgements based on contemporary evidence	• Safe and accurate; fairly confident / efficient • Needs occasional direction or support • Beginning to initiate appropriate actions • Identifies priorities with minimal prompting	• Actions / interventions / behaviours generally appropriate for the client and situation • Explanation is usually at an appropriate & coherent • Identifies the need for assistance
Independent (I)	• Applies evidence based knowledge • Demonstrates awareness of alternatives • Sound rationale for actions • Makes judgements / decisions based on contemporary evidence	• Confident / safe / efficient • Works without direction / supervision • Able to prioritise • Able to adapt to the situation	• Conscious / deliberate planning • Actions/ interventions/ behaviour are appropriate to the client & situation • Gives coherent / appropriate information • Identifies & makes appropriate referrals

Appendix B

RECORD OF PROGRESS INTERVIEWS **Mid-point (Progress to date)**

Name of Student:	**Cohort:**

Signature of Student: _____   Date: _____

Signature of Mentor: _____

INTERPERSONAL SKILLS PROFILE

Mid-point (Progress to date)

Name of Student:	**Cohort:**

Please select FIVE comments from the list, which most nearly describe the performance of the student.

1. Unsafe to practice
2. Behaves in an unprofessional manner
3. Displays a negative attitude
4. Blames circumstances for difficulties encountered
5. Appears to lack motivation
6. Does not define learning needs
7. Lacks self-awareness an the effect of behaviour on others
8. Needs to take responsibility appropriate for this level
9. Lack of confidence inhibits effective performance
10. Needs more experience at this level
11. Reacts adversely to constructive criticism
12. Slow to settle
13. Lacks maturity
14. Needs to be more assertive
15. Could have made more use of available resources
16. Has not achieved full potential
17. Willing to try
18. Has developed in confidence
19. Skills will develop with practice
20. Assimilates new information
21. Accepts appropriate responsibility
22. Fits well into the team
23. Has a pleasant and approachable manner
24. Displays a mature attitude
25. Well motivated and adaptable
26. Is able to reflect on outcomes
27. Identifies own learning needs
28. Has made a useful contribution to the work of the team
29. Shows a good understanding of the concepts of paramedic care
30. Displays confidence
31. Analytical in approach, drawing from a wide range of sources
32. Offers informed and considered opinions
33. Realistically evaluates performance
34. Capable of informed decision-making
35. Shows a mature understanding
36. Valued team member who has gained respect
37. Innovative, develops fresh ideas
38. Consistently works at a higher level than expected
39. An excellent performer in all areas

WRITE THE NUMBERS OF THE COMMENTS WHICH YOU HAVE SELECTED IN BOXES BELOW

Signature of PPEd:				Date:
Signature of Student:		Signature of Programme Leader:		

Appendix D

Developmental Action Plan

Area for development	Actions needed	Success criteria and date to be achieved by	PPEd signature

FINAL RECORD OF ACHIEVEMENT

STUDENT NAME	STUDENT NUMBER

Year 1	Delete as required		PPEd Signature	Student Signature	Date
All elements of practice have been assessed and passed at the required level in this year	YES	NO			
Comment on student's punctuality and attendance:			Print name below	Print name below	
At the retrieval of practice, all the elements of practice have been assessed and passed at the required level in this year *(N.B. This section is only to be completed if the student is repeating this placement)*	YES	NO			Date
Comment on student's punctuality and attendance:			Print name below	Print name below	

N.B. On this page **shaded boxes should only be completed if the student is repeating all practice following a failed 1st attempt** as authorised by the University and Ambulance Service

Calendar

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Foundation Degree in Paramedic Science