Enabling Learners to Develop Professional Attitudes and Capability : Curriculum Design Aid
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Introduction
This Guide has been written for colleagues on the University of Surrey PG Certificate in Academic Practice Programme. It provides 'food for thought' for teachers who are interested in designing a module so that it combines and integrates opportunities for disciplinary study and the development of professional attitudes and capability. It provides a number of perspectives on the qualities, skills and attitudes needed to be an effective professional: some ideas on how a higher education might enable learners to develop these and some links to additional resources. Feedback and additional suggestions are welcome. Norman.Jackson@surrey.ac.uk

University of Surrey curriculum context
For over 50 years the University of Surrey has been at the forefront of providing undergraduate education that seeks to combine academic development with the development of capability for working in the professional environment. Outside the Health programmes which have a fully integrated theory/practice curriculum, the main curriculum strategy we use to develop professional capability is the year long placement in a professional work environment. The University uses the term Professional Training[1] to describe this type of work integrated curriculum and it has proved to be successful in enabling our graduates to secure employment on completion of their degree. Between 1996 and 2007, Surrey had an average employment rate 6 months after graduation of 97.8 per cent, compared with the national average of 93.8 per cent: the highest of any English university[2].

Institutional policies that reflect the University's commitment to developing professional capability

Validation Policy:
All undergraduate programmes in all disciplines (unless subject to statutory regulation e.g. in health-related professions) must provide opportunities for learners to develop their professional capabilities through year long work placements that will lead to outcomes that are relevant to learners' programmes. The University's Professional Training

and Careers Committee overseas the performance and regulation of Professional Training and programme teams have to present their designs before a programme can proceed to validation.

Further information about Professional Training can be found at: http://www2.surrey.ac.uk/professionaltraining/

The challenge: Only half of our students participate in professional training year. If we believe that developing professional capability is fundamental to the Surrey graduate – how are we developing these capabilities for all students outside the professional training experience?

Student Experience Strategy July 2008

Maintain distinctiveness: *by building a sustainable model to deliver "a complete education"*
We recognise the value of real world, hands-on, professional experience (currently mainly via the professional training year - PTY) as a key contributor towards our distinctive success in professional preparation. We want to enhance opportunities for the development of professional intelligence and capability for students who do not participate in the PTY
We will
- Continually seek new and robust ways of offering experience-based opportunities for learning that contribute to the development of the whole person , we understand whole person learning to include professional intelligence, skills and identity; and interpersonal, social and emotional, as well as intellectual, development
- we will develop a range of curricular and non-curricular opportunities for learning
- we will develop a toolkit to identify, document and appropriately recognize a broad range of whole-person learning, including strengthening PDP across the University

Develop the idea of a "life-wide curriculum" as an important part of our understanding of a complete education. *We recognize this implies a rethinking of the academic curriculum, the role of professional services, the importance of co-curricular (USSU, Cultural Academy, etc) and non-curricular (external life events) activities for learning. We acknowledge that this will also require new ways of recognising learning gained from experiences outside formal academic programmes*

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[1] **http://www.surrey.ac.uk/professionaltraining/**
[2] Based on date from the Higher Education Statistical Agency (HESA). http://www.hesa.ac.uk/

1. General expectations of developing professional attitudes to study

If we treat studying in higher education as a form of work – where the purpose of work is learning and high achievement, then perhaps we can encourage students to develop professional attitudes and behaviours to study as if they were working in a professional environment.

2. Generic outcomes for a University of Surrey graduate

The University's graduate skills statement published in 2003 sets out a number of desirable outcomes that the Surrey educational experience should provide. Many of these lay the foundation for professional capability.

'Programmes offered by the University of Surrey are intended to ensure that graduates are professional, self-reliant, adaptable, creative, enterprising and ethically aware individuals, equipped with an excellent mix of subject knowledge and related skills, experience of the wider world and the graduate skills necessary for their careers and personal development.'

The graduate skills which all students at Surrey should possess are closely linked to the University's outstanding reputation for links with industry and the world of work. These are:
- Communication skills – e.g. written, oral, listening, visual
- Intellectual and cognitive skills – e.g. critical analysis, synthesis, evaluation, ability to challenge given views
- Interpersonal skills – e.g. working with others, leading others, flexibility, reliability
- Research and enquiry skills – e.g. competence systematically to explore existing knowledge, develop research questions and devise appropriate methodologies to arrive at results that add to knowledge
- Self-management skills – e.g. ability to accept responsibility for and manage personal learning and development, time management, taking initiative.
  Surrey graduate skills statement 2003

3. Programme specific learning outcomes

All programmes will be designed with a set of educational outcomes in mind. Some of these may be particularly relevant to the development of professional capability. Check the programme handbook or discuss this with the programme leader.

4. Important aspects of professional behaviour

Some important aspects of professional behaviour are listed below (Hughes 2009). **The question for teachers is, 'how can we support these things through our educational designs?**

Respect for others

Showing others respect is the basis of all professional behaviour. It includes:
- Being courteous and having good manners
- Being punctual
- Keeping confidential details confidential
- Being fair in all dealings
- Keeping personal opinions of people private
- Doing what needs to be done, not leaving it for others to do
- Acceptance of constructive criticism
- Being fair and gentle when giving feedback
- Dealing with sensitive issues privately
- Make allowances for other's mistakes
- Listen to others
- Apologise for any errors or misunderstandings
- Speak clearly and in language that is appropriate and that the receiver can easily understand

Responsibility and integrity

All professionals need to take responsibility for themselves and their work. They need to consider consequences and the impact on others.
- Honesty is crucial – avoid even the smallest of lies at all costs
- If you commit to something, then follow through with it
- If you are delayed, let the other person know as soon as possible
- Always be respectful about competing businesses/people – point out your benefits rather than their faults
- Be prepared before meetings and when presenting reports and the like
- Ensure you have made yourself clear to avoid any miscommunication
- Avoid conflicts of interest
- Be impartial – keep personal bias and intolerances out of the business world
- Be reliable and dependable
- Take appropriate actions, rather than trying to hurt someone or their business when you feel wronged
- Ensure you present yourself pleasantly with good hygiene and appropriate dress codes.
- Pay for services and products promptly, whatever the cost to yourself

- Demonstrate self-control and avoid public arguments and disagreements
- Commitment to quality

> To become a professional, you must: study constantly and prepare routinely; hold yourself to high personal standards; and commit to excellence in all you do (Reilly 2003)

5. Importance of real world experience

The best way of enabling students to gain insights into what being professional means is to design into the curriculum opportunities for real world experience. The term *work integrated learning (WIL)* is used around the world to describe a curriculum that actively seeks to combine subject study with real world work experience. The University of Surrey operates a WIL policy for all of its programmes outside the regulated health programmes, by mandating that all programmes should provide opportunities for students to spend upto a year on a work placement that is relevant to their area of study or chosen career. The challenge for curriculum designers relates how students who are going on placement are prepared, how they are supported while on placement and how they draw out the learning they gain, and how their experience is utilised when they return.

Outside the Professional Training year students can still can valuable experiences through which they can develop qualities, skills and capabilities that are relevant to being an effective professional through part-time jobs, volunteering and participation in extra-curricular activities. The University is in the process of developing an award scheme that will value and recognise this informal but real world relevant learning which we are calling life-wide learning.

Visit our Life-wide Learning wiki to find out more
http://lifewidelearning.pbworks.com/

6 Listen to what students say about what learning to be professional means to them when they have been through their placement experience
Watch this video and be inspired
http://learningtobeprofessional.pbworks.com/Designing-for-professional-capability#view=page
And read this booklet produced by Lori Riley:

http://learningtobeprofessional.pbworks.com/Student-stories-of-placement-experiences

7. John Cowan's propositions for educational designs that support learning to be professional

Professor John Cowan draws from reflections on his own life experience as a professional designer, teacher and educator to create a set of principles for the design of experiences that encourage and support the development of professional capability (Cowan 2009)
http://learningtobeprofessional.pbworks.com/Learning+to+be+Professional%3A++Reflective+thoughts+on+a+life-time+of+trying

1. Ensure that, if "**learning to be a professional matters**", then this is explicitly **acknowledged and valued** in every aspect of the programme –promotional materials, intended outcomes, curricular design, learning experiences, course materials, assessment and feedback.

2. Overtly concentrate on encouraging and enabling learners to become **the kind of person they want to become**, personally and professionally. Help them to discover this person and nurture their will to be and become.

3. Incorporate into the educational design opportunities for students to **self-create, plan and self-direct their learning, manage their activity in learning and developing, monitor progress against aims, and in due course evaluate attainment**.

4. Encourage learners to **create or access real and relevant experiences** that will help them appreciate what being professional means; and value their attempts to make their own education more complete.

5. Place appropriate emphasis on the various **interpersonal abilities** which are key life skills and crucial in professional life. Encourage learners to appreciate that these abilities are developed and practiced in all aspects of their lives.

6. In encouraging development of relevant abilities, urge that careful consideration be given to **life balance**, so that study, employment and social activity are all recognised as important.

7. Ensure that **transferability** of abilities is stressed (especially in assessment), and that evidencing of performance can occur at any point in a programme or outside it.

8. Stress the importance of self-evaluation as a key professional skill and expect students to **self-evaluate** their developments overall and **holistically**, and not in a compartmentalised arrangement.

9. Place more emphasis on **formative** assessment (which identifies need and scope for development) than on summative assessment (which ranks performance at a given point in time).

10. Accept that if an aim matters to a student, then it matters. Show genuine **unconditional positive regard** for self-directing aims and self-determined outcomes.

11. Ensure that personal development tutoring, in particular, **empathises** with affective needs, which are often more important for learning than cognitive or interpersonal aims.

12. Welcome situations in which tutors learn from or with students, and otherwise exhibit **congruence**.

13. Encourage rigour and **objectivity** in planning and evaluating; discourage subjectivity, while recognising that decisions based upon values are often made in the heart – and poorly justified.

14. Structure the programme carefully to promote interaction with, and support from, peers, with **socio-constructivist** impact on learning and development. Peers can usefully contribute opinions, comparable and contrasting experiences, and insights. Make it clear that peers who assist have been shown in many research studies to profit more than those they assist!

15. Create opportunities for learners to **interact with professionals** in the disciplinary field to provide them with insights into their professional world; and encourage them to engage in professional conversation.

16. Encourage students to learn to be incisive **users –** using resources, tutors, specialists in libraries, IT and elsewhere, and peers – to good effect.

17. Teach and enable learners to practice the skills which allow them to form productive relationships in social environments, and to **network** to good effect. For these are skills which do not come naturally to most students, in relation to learning and developing purposefully and effectively.

18. Overtly discuss what being professional means, and encourage the pooling of perceptions based on learners' own experiences. **Encourage them to identify people whom they admir**e **for their professionalism, and to analyse what it is that defines their professionalism**.

8. Michael Eraut's epistemology of professional practice

Michael Eraut (Eraut 2007, 2009) defines the basic epistemology of practice in professional work situations as:
*   *Assessing situations* (sometimes briefly, sometimes involving a long process of *investigation and enquiry*) and continuing to monitor the situation;
*   *Deciding what, if any, action to take*, both immediately and over a longer period (either on one's own or as a leader or member of a team);
*   *Pursuing an agreed course of action*, performing professional actions - modifying, consulting, evaluating and reassessing as and when necessary;
*   *Metacognitive monitoring of oneself*, people needing attention and the general progress of the case, problem, project or situation; and sometimes also learning through reflection on the experience.

http://learningtobeprofessional.pbworks.com/How-professionals-learn-through-work

9. Learning to be Professional : the important role of Personal and Professional Development Planning:

Helping learners develop deeper awareness and understanding of this epistemology of practice (learning for performance and learning through performance) and creating lots of opportunity for students to practise this way of developing personal knowledge and co-creating knowledge with others, is central to the way we are approaching integrative learning through our concept of life-wide learning through a life-wide curriculum. We need to embed these ideas of self-regulation and the spaces for students to exercise their choices and practice self- regulation into our educational designs and we are aided by the adoption in the UK of an approach to learning that is being promoted through a UK-wide policy called Personal Development Planning (PDP[3]).

PDP processes contain a set of interconnected activities (Jackson 2003) namely:
*   thinking about and planning – how to do / achieve something;
*   doing something / acting on plans – learning through the experience of doing with greater self-

[3] At the University of Surrey we call this Personal and Professional Planning to link it to our strong commitment to developing professional capability.

awareness – and modifying improvising plans through the experience of doing;

- recording – thoughts, ideas, experiences, both to understand better and to evidence the process and results of learning;
- reviewing – reflections on what has happened, making sense of it all;
- evaluating – making judgements about self and own work and determining what needs to be done to develop/improve/move on;
- using – the personal knowledge and sense making derived from PDP to do something different and / or change behaviours or future actions

Developing students' self awareness of how they are learning and developing their knowledge for performance (e.g. assessment) through PDP processes is an important consideration when designing a curriculum for professional capability.

10. The importance of authentic experiences

Authenticity refers to providing students with learning experiences derived from observing, participating in or doing real, consequential and professionally meaningful activities in real work settings. Authentic contexts enable students to integrate disciplinary learning with real work through meaningful and consequential activities undertaken in the workplace.

Characteristics of authentic learning experiences
- real world relevance – activities need to be as close as possible to real world tasks. In the real world learning is a bi-product not the purpose of work
- ill-defined challenges and problems, requiring students to identify all tasks and sub-tasks to be completed. Such problems do not have right or wrong answers but are open to multiple interpretations and possible solutions.
- consist of complex tasks requiring significant investments in time and sustained effort and commitment of intellectual resources
- provide opportunity for students to assess situations from different perspectives
- encourage learners to determine for themselves what they need to know and to go and find out.
- encourage learners to work with tacit knowledge of the people around them and to use these people to create their personal knowledge resources in order to complete the tasks
- promote collaboration – complex work problems usually require groups of people to work together to solve them

- provide opportunity for the comprehensive engagement of the epistemology of practice (see Eraut section 8) ie assessing situtions, deciding what to do, planning, doing it and reflecting on performance and results.
- are integrated with performance assessment in which the emphasis is on the holistic evaluation of capability.. sustained engagement with the problem of a period of time – rather than assessment of a single task.
- Produce meaningful outcomes which are valuable in their own right rather than preparation for something else.

11. The importance of problem solving and enquiry-rich learning

Problem solving, particularly involving complex problems that must be viewed from different perspectives, is a type of situational analysis that professionals encounter every day. A problem and enquiry-rich curriculum that is full of assessing situations, deciding what to do then doing it and evaluating the outcomes is intrinsically contributing to the development of professional capability. Professionals are able to integrate their personal knowledge and learning and to find out what they need to know in order to do the things they need to do.

12. The importance of integrative thinking

'Developing students' ability to integrate and apply learning [in different contexts] is an important piece of what makes higher education relevant to today's world. On any given day newspaper headlines point to the need for graduates who are sophisticated in their thinking, able to discern complexity in situations, and motivated to continuously seek better, more responsible, solutions to problems encountered in work, in life and in society… The current context also requires graduates who are creative; who can anticipate the not-yet-known, and negotiate rapid technological, cultural, and global shifts.' Association of American Colleges and Universities (2009). **These perspectives on integrative thinking are highly relevant to the development of professional capability (Jackson 2009).** http://learningtobeprofessional.pbworks.com/Intergrative-Learning

What is so significant about the pedagogies that nurture integrative learning (Klein 2005:3) is that: 'traditional teaching functions of telling, delivering, directing and being a sage on the stage are (substantially) replaced by the models of mentor, mediator, facilitator, coach and guide…..The process is constructivist at heart. Students are engaged in 'making meaning'. Applications of knowledge takes precedence over acquisition and mastery of facts alone, activating a dynamic process of question posing, problem posing, decision making, higher-order critical thinking and reflexivity. A set of core capacities emerge from the intersection of these two concepts:

- asking meaningful questions about complex issues and problems
- locating multiple sources of knowledge, information, and perspectives
- comparing and contrasting them to reveal patterns and connections
- acknowledging and negotiating their contradictions
- creating an integrative framework and a more holistic understanding
- understanding issues and positions contextually
- being able to use information by integrating into their existing knowledge and adapting it so that it can be used in other situations.'

13. Capability for productive enquiry

Closely linked to the development of integrative thinking is the development of capability for enquiry and creating opportunities for students to develop their skills for enquiry is another way in which a curriculum can become more nurturing of capabilities that are relevant to being an effective professional.

Productive inquiry is a unifying concept for learning because it can be applied to all situations : from scientific investigations to situations that crop up in our daily lives. It is a capability we need in all working contexts. 'Productive inquiry is not a haphazard, random search; it is informed or disciplined by the use of theories, rules of thumb, concepts and the like. These tools for learning are what Dewey understands the term knowledge to mean and using knowledge in

this way is an example of that form of knowing which Dewey called productive inquiry' (Cook and Brown 1999:62).

Many of these core capacities for being an integrative learner can be related to the process of inquiry which John Dewey considered to be 'the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole.' The idea of 'productive inquiry' (defined by Dewey 1922 discussed by Cook and Brown 1999) is the ability to pose and form good questions and be able to find things out in order to make good decisions about what to do is an essential capability to be developed if we are to help learners become integrative thinkers and doers.

14. Michael Eraut's learning trajectory model of professional capability

Being able to begin to engage with a situation and then follow through with appropriate actions require **capability,** defined by Michael Eraut in terms of **"what individual persons bring to situations that enables them to think, interact and perform"** (Eraut 1997, 1998), and " it is everything that a person (or group or organisation) can think or do" (Eraut 2009 p6). Developing capability is a never ending (life-long and life-wide) story and it has both generic transferable dimensions and highly specific situated dimensions that may or may not be transferable. Being an integrative thinker and being able to integrate learning are important dimensions of capability for professional people.
Michael Eraut has developed a concept of professional capability (Table 1) based on the learning trajectories he has witnessed when observing professionals working (Eraut 2009:5). The items in the table can be used as prompts by teachers to help them evaluate their curricular designs to see where these elements of capability are being practiced and developed or as prompts for thinking when creating a new educational design.

Table 1: A Typology of Learning Trajectories (Eraut 2007, 09) - How can we nurture the development of these capabilities through a higher education curriculum?

Task Performance

Speed and fluency
Complexity of tasks and problems
Range of skills required
Communication with a wide range of people
Collaborative work

Awareness and Understanding

Other people: colleagues, customers, managers, etc.
Contexts and situations
One's own organization
Problems and risks
Priorities and strategic issues
Value issues

Personal Development

Self evaluation
Self management
Handling emotions
Building and sustaining relationships
Disposition to attend to other perspectives
Disposition to consult and work with others
Disposition to learn and improve one's practice
Accessing relevant knowledge and expertise
Ability to learn from experience

Teamwork

Collaborative work
Facilitating social relations
Joint planning and problem solving
Ability to engage in and promote mutual learning

Role Performance

Prioritisation
Range of responsibility
Supporting other people's learning
Leadership
Accountability
Supervisory role
Delegation
Handling ethical issues
Coping with unexpected problems
Crisis management
Keeping up-to-date

Academic Knowledge and Skills

Use of evidence and argument
Accessing formal knowledge
Research-based practice
Theoretical thinking
Knowing what you might need to know
Using knowledge resources
Learning how to use relevant theory
(in a range of practical situations)

Decision Making and Problem Solving

When to seek expert help
Dealing with complexity
Group decision making
Problem analysis
Formulating and evaluating options
Managing the process within an appropriate timescale
Decision making under pressure

Judgement

Quality of performance, output and outcomes
Priorities
Value issues
Levels of risk

The distinction between capability and performance is that *capability is normally inferred from a series of performances* and should not be judged on only one performance, whereas every performance is *context dependent* (Eraut 2009b). Hence performances in more complex and difficult contexts should not be expected to be as strong as those in easier contexts. The *context* for an individual could include people, events and practices. Capability is obviously influenced by learning but current capability also influences the ability to learn.

15. Copying and adapting what other teachers do

The Australian Collaborative Education Network (ACEN) has produced an excellent set of on-line curriculum vignettes which describe different

approaches and disciplinary contexts for combining and integrating learning through work and disciplinary study. These capacities are all relevant to being an effective professional.

> These curriculum vignettes can be accessed through the Designing for Capability page on the Learning to be Professional wiki http://learningtobeprofessional.pbworks.com/Designing-for-professional-capability#view=page

16. Designing for professional capability – concrete ideas

35 participants on the PGCAP course were invited to think of as many ways as they could in 10 minutes for redesigning a module so that it was more able to encourage and support the development of attitudes and capabilities that are important in being professional. Ideas were put on post-its and then categorised.

Encouragement & recognition
- Encourage students to become they person they want to be through work
- Encourage independent learning processes
- Encourage students to self-evaluate
- Make students aware of how they can acquisition transferable skills
- Recognise transferability of skills & inform the students about this
- Recognising and accommodating different personalities and life styles
- Encourage students to research what it means to act and behave professionally in our industry
- Encourage students to write their reflection from placement or part-time work experience
- Emphasis how elements of the module can be used in other modules on the course
- Encourage students to find a 'champion' in their subject and promote the course
- Develop interest and passion about the subject and its relevance to society
- Bring lab materials to classroom
- Encourage students to maintain a life balance

Identify and make explicit generic skills that are important to being successful as a professional and show students how they are developing and practicing these skills
- Organisational skills
- Problem-solving skills
- Presentation skills

- Communication skills
- Critical thinking
- Time management
- Group Work – interpersonal skills
- Team Work
- Preparedness
- Reliability
- Create practical guidance to show what capability/competency means in these skills

Help students learn how to present themselves and their work to professional standards
- Training in professional writing and communication
- Training in professional presentation – exposure to professionals presenting in business situations
- Developing a repertoire of communication styles (especially in writing)
- How to use Web 2.0 like podcasts
- Ask students to prepare a high quality booklet with slides
- Ask students to summarise questions from each lecture
- Create video clips of professional presenting to give students an idea of the standards that would be expected.
- At the start of each lecture have a student group do a 5minute presentation on a topic given to them the week before and get the rest of the students to give them feedback on their performance

Give students lots of experiences of team working
- Group project
- Long-term group research project to increase commitment
- Groups working on each domain (I/O & responsibility)
- Group discussions of real world cases – sharing knowledge
- Different groups undertake different practicals and then write-up an industrial style report for others to see
- Co-operative practicals – one group works with the results of another groups research
- Give them a small project to do in a group so they learn how to work as a team
- Mix teams up each week so they don't know the people they are working with
- Encourage students to work as a volunteer for a project in that field
- Encourage group discussions on current topics
- Promote self-activities in group projects
- Teaching and learning collaboration
- Promote team working exercises
- Develop team working to demonstrate the benefits

- Set problems where the students have to work in teams
- Use exercises in class that promote team work
- How to work as part of a team – set small projects involving team work
- Provide guidance and support to team leaders

Exposure to professionals and real world experiences
- Visits to real companies
- Invite industry professionals to share their experiences of real work challenges
- Guest lecturers from industry
- Bring in professionals to talk to students
- Involve professionals in judging competitions like projects or presentations
- Have industrial experts come in and tell students what is important
- Use alumni now working in the professional world to present to current students
- Use students who have undertaken a placement year to talk to other students
- Draw on mature students in the group who have experienced the professional world
- Visits to relevant government agencies/organisations
- Integrate visits to organisations and assess students professionalism while they are on the visit
- Visit other industries and compare different professional aspects
- Get a practical/visual experience of a real world topic (movies/documentaries/YouTube?)
- Provide insights into the role of professionals in industry
- Links to industry
- Introduce industry partner (outside eye)
- Demonstrate the relevance of the context and theory to industry and business
- Incorporate site visits to lab settings as learning experience
- Incorporate industrial applications into the content

- Illustrate and discuss methods with concrete real world examples
- Give assignments that leads students to explore the real world rather than being directly taught
- Sharing interview findings with students
- Interview and networking with retail professionals
- Include industrially relevant skills in practical work
- Field trips and reflection

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