An e learning model of interprofessional education

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Interprofessional Education

Making It Happen

Edited by

Patricia Bluteau and Ann Jackson



An e Learning Model of Interprofessional Education

Patricia Bluteau and Ann Jackson

Introduction

This chapter aims to describe one e learning model of interprofessional education (IPE) which occurs virtually across four university sites, innumerable practice placements and on the plethora of computers across the homes of participating students and facilitators. It aims to enable the reader to have an insight into the development, implementation and evaluation of this model. The ideal IPE model, whilst meeting the aims of IPE set out by CAIPE, would also be cost and time efficient. More importantly perhaps, is the need to offer IPE activities which engage all participating students, so that they appreciate the benefits of collaboration and teamworking not only for patients/service users/clients/carers, but also for themselves. These activities need to be sustainable over time. This chapter will look at one model of IPE an online model interwoven through a three year curriculum, which allows IPE activities to be undertaken asynchronously by large numbers of students (1000+) simultaneously. The advantage of this model is the method of delivery which allows students in any location and on any shift pattern and length to participate in IPE activities - the challenges, however, are IT access with the necessary prerequisites to access and run the software, the lack of face-to-face contact, and the fact that students can work cooperatively as opposed to collaboratively (see Chapter 10).

It is important to mention that online IPE is gathering pace across the UK and further a field with a growing body of evidence helping to create and develop new ways of working in an interprofessional 'virtual'

world (Connor, 2003; Hughes et al., 2004; Juntunen and Heikkinen, 2004; Moule, 2006; Miers et al., 2007).

Interprofessional e Learning Pathway (IPeLP)

It is unlikely that any one method of IPE will be perfect – there are those (both student and teacher alike) who are emphatic that IPE has to occur within practice for it to have any learning value; there are others who believe that IPE must also have a base in academic learning if it is to be seen of educational value; and there are those who do not see the need for IPE at all. Blended learning may be the way to satisfy both camps, although IPE in practice is more likely to win over the sceptics.

The IPeLP provides IPE via an online medium, allowing students to explore and discuss topics relevant to their IPE objectives at a very early stage in their training (first term/semester), as well as providing the opportunity to build on learning and understanding, allowing the delivery of increasingly more complex topics/issues at varying points through professional training.

Here we will describe the actual requirements of the pathway as well as the changes over time.

Overall aim of the IPeLP

- To provide students with an understanding of the importance and relevance of the roles and responsibilities of different professional groups involved in delivering patient/client/service user care.
- To embed within the undergraduate curriculum of 13 health and social care professional groups in two higher education institutions.
- To weave IPE throughout each professional curriculum building on and reinforcing learning.

The IPeLP has 3 levels (Table 6.1). Each level lasts 4 weeks. Level 1 begins very early in the participating professionals' entire curriculum (i.e. 2 months following start of their training). Level 2 occurs in year 2 and Level 3 in year 3 of student training. For those professions undertaking a four year course, Level 3 is placed in year 4 of their training.

Table 6.1 Timings of IPeLP

IPeLP levels	Length of online activity	Time of year	Year of training
Level 1	4 weeks	November/December	Year 1
Level 2 Level 3	4 weeks	May/June March/April	Year 2 Year 3 (4)

Learning outcomes and delivery format

The IPeLP draws on the Interprofessional Capability Framework (CUILU, 2004) for it's learning outcomes at Levels 1, 2 and 3. Each level is supported by a student guide (Appendix 1). Students are expected to complete summative reflective pieces of work which are supported with evidence of their own and their colleagues' contributions to the virtual discussion board. Currently, the IPeLP uses a series of case journeys as a focus for group discussion. Attached to each journey are a series of weekly e-activities which students are expected to complete.

Online IPE provides an environment, where large numbers of students can participate irrespective of placement, institution or type of course (e.g. part time/full time). At each level the IPeLP can cater for over 1000 students participating simultaneously online (Table 6.2).

Students work in virtual learning sets (VLS), of 15, supported by one e-facilitator to two groups. There is usually a student mix of 4–6 professional groups per VLS. Each VLS has their own case journey and their own web-based discussion forum, which is only accessible by members of the group and their facilitator. The facilitator plays an important role in the group discussions by encouraging the students to participate, to diffuse any difficult or stereotypical comments and to answer any questions. All facilitators are trained in interprofessional e-facilitation

Table 6.2 Range of Professional Groups Participating in IPeLP

Professional groups				
Occupational therapists	Operating department practitioners	Learning disability nurses		
Physiotherapists Social workers Mental health nurses Clinical psychologists	Adult nurses Children nurses Dieticians Youth workers	Medics Midwives Paramedics		

skills prior to facilitating, in a five-week course which is based upon the Gilly Salmon (2000) e-facilitation model.

The case journeys are authentic, based on real life experiences, and students are matched to the journey according to its relevance to their discipline. This ensures that all students, within the group, have a role to play in the delivery of care within the journey.

Students are brought together for one face-to-face session prior to completing the 4-week case journey online. This face-to-face session provides students and the facilitator with an opportunity to meet each other and to learn about the course design and learning outcomes of the online patient journey. Organising the face-to-face sessions is a logistical challenge, finding rooms and time when all students are free is difficult; our experience, however, shows that the majority of students prefer to meet prior to the online activity at Level 1; thereafter in Levels 2 and 3, meeting or not meeting prior to the start of the online pathway does not seem to be important or affect student participation.

The online environment

Here the need for a learning technologist is a must. The opening page needs to be engaging and welcoming to both students and facilitators alike (Figure 6.1). It has to provide all the information necessary to

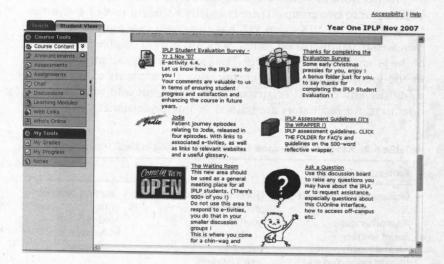


Figure 6.1 Making the online environment interesting and welcoming

complete the pathway (assessment information, student guide, access to individual discussion group and a forum where they can ask any questions), prior to the release of the first episode and following the face-to-face session. It is useful and important that all students access the online forum prior to the start of the online activities. Not only does this identify and provide time to resolve access and log in problems with any students but also allows time for ironing out any navigation difficulties a student may have. This is especially important when the level of computer literacy and ability of each student is unknown.

All students are encouraged to explore the front page of the site and to post a message in the 'Arrivals Lounge'. Students are also able to enter their group discussion forum which has a brief overview of the case journey they will be studying.

In our experiences students particularly value the 'Arrivals Lounge' which they are able to use as a chat line to over 1000 colleagues. Initially, we found it necessary to close the lounge once the first episode was released as it proved to be confusing for some students who tried to complete their small group activities in this larger forum. Prior to the launch of the journey the learning technologist and IPeLP year leads monitor student online activity and answer any difficulties via the 'Ask a Question' thread. This means that most access and navigation difficulties are rectified prior to starting the journey.

Facilitators web space

The creation of a facilitator web space which is 'safe' from students is useful, some would say essential (Figure 6.2). Within this space there are student group lists (with e-mail addresses), essential when trying to make contact with non-participating students.

A virtual café provides refreshments and a chance to share issues with colleagues. A 'Help needed' section provides the opportunity to identify and resolve difficulties. A 'Good tips' provides sharing of best practice between facilitators, especially useful when the course is running. Sharing information in this way shares the workload by providing such things as 'welcome messages', techniques for managing the discussion space and so on.

Case journeys

For Levels 1 and 2, 12 e learning case journeys are available for use. Each year they are reviewed to ensure that they are still accurate. Most of these

My Modules | Accessibility | Help | Log out

IPLP Facilitators' Support Web Yr 1 Nov 2007

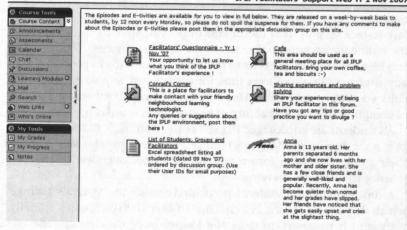


Figure 6.2 Facilitator forum web space on the IPeLP

journeys are authentic and follow a person's journey along a care pathway. These journeys involve a medical condition such as cancer, mental health or in others pregnancy or drug abuse. The journeys are divided into four episodes, each week an 'episode' of the journey is released (Figure 6.3).

Use of video, audio or written text can be used to deliver each weekly episode; currently, we deliver most episodes by written text, as this requires the least sophisticated software and advanced computer for access. We have experienced minimal problems with students accessing video transcripts (where we have used them) and student feedback has shown that they are welcome additions to each episode providing a 'face' to the journey. The art of each video, however, is to ensure that they are short and specific. Where we have used audio to supplement the journey (these tend to be tapes capturing experienced health and social care professionals' views on their role in the specific case journey), we did experience some problems with this format as many computers out on placement do not have, or have disabled, the audio outlet and where the audio does work students need to have earphones. As we have no way of controlling for this we always provide a transcription of the interview.

890 800

Your location: <u>Learning Modules</u> > <u>Discussions</u> > <u>Richard</u> > **Episode 1**

Episode 1

Richard is 39 years old. He is of an African-Caribbean background. Richard was born and raised in an inner city area of Birmingham. He has one brother and one sister. Richard's father left the family when Richard was 15 years old. His parents were divorced in the early 1980s. Richard has been unemployed for the past nine years. He dropped out of college when he was aged 19. He currently receives benefits. Richard is single and lives alone in a one bedroom flat. His mother lives nearby and is in close contact with him.

Richard has a history of suffering from Schizophrenia. His previous admission to hospital was 8 years ago. Since discharge from hospital, Richard has been cared for at home by his Community Psychiatric Nurse (CPN). Recently Richard's family and CPN have become increasingly concerned about his behaviour.

Last week Richard took a train from Birmingham to Manchester in an attempt to run away from his Community Mental Health Team. He was scared that he was going to be placed under a Section of the Mental Health Act. According to Richard, his fear was based upon the fact that he had travelled to the Community Mental Health Team by bus, as opposed to the car, his usual means of transport.

In Manchester, Richard was placed on Section 136 by the police and was admitted to a mental health unit. It later emerged that Richard had attempted to go to his local Accident and Emergency department prior to travelling to Manchester because he believed that his brain was being removed.

Richard has now been transferred to an Acute Admissions Unit in Birmingham. He has been detained under Section 3 of the Mental Health Act (1983).

Figure 6.3 Example of year 1 case scenario

Each episode is supported by a series of activities which the students must complete. Usually there are about 3-4 activities although the number is dependent on the content of each activity (Box 6.1).

Box 6.1 e-Activity 1.1: Week 1: IPeLP: Level 1

e-Activity 1.1

Hello and welcome

It's time to meet each other online. The main area for discussion, debate and learning will be in the discussion area which in effect is an online conferencing facility. Whenever you see an e-activity described, you should be able to click on the related discussion area, displayed under 'Discussions', so that you can start contributing straight away.

To let us know that you have arrived safely post a message into your discussion group.

Box 6.1 (Continued)

Objective

Post a message and tell us who are you, what course you are studying on and what your expectations are of the pathway?

You may like to attach a photograph of yourself to your posting, to allow your group members to put a face to a name! (When creating your message click on 'Enable HTML Creator' to access the HTML Editor which allows you to do great things like adding a picture and using the spell-checker).

Note: If you do manage to attach a photograph to your posting, please assist your colleagues who may not be so technically minded.

If you succeeded in posting a message last week, please expand on your initial thoughts and impressions of the IPeLP.

By episode 3 there may only be 2–3 activities but each activity may have two parts – for example, each student may be asked to describe their own professional role in the case scenario at this point, and to ask a question of one or two other professions in their discussion group. This means that they provide a description of their own role; they ask two questions of the others and have to respond to any questions asked of them (Box 6.2). This sort of activity aims to encourage student exploration of each other and to encourage 'conversation' type postings – if this works (it is highly dependent on the students' motivation to participate and log in frequently), then the students begin to relate to one another and real student interaction can be observed.

Box 6.2 e-Activity 2.2: Week 2: IPeLP: Level 1 e-Activity 2.2

Aim

To explore the role of different professional groups in supporting the family of the patient.

Objective

- 1. First, read the latest episode and consider the role that your profession would play in both supporting and giving information to the family. If your profession is not involved at this stage, how would you expect other professions to be communicating with you and considering your possible future involvement?
- Post a considered response to at least two other postings from your colleagues. Once you have completed this task continue with e-activity 2.3.

One of the problems with online groups relates to the asynchronous nature of the medium - that is, some students will complete the activities by Monday (the day they are released) and will be awaiting a response from fellow students, whilst others may not even log in until Thursday/Friday. This delay can be very de-motivating for students and so it is an important aspect to highlight and encourage students to engage at the very beginning of the journey - we have recently introduced a student agreement form which all students sign to agree to log in online at least 3 times per week - it is possible that we will also make this an assessed aspect of the 4 weeks, although it is likely that enforcing this will increase the facilitators' workload. Another difficulty is ensuring (a) that students do complete the second part of the activity and (b) that they respond to any questions posed by their colleagues. It seems that students can quite easily complete the activities yet not be truly interacting - a token exercise. Whilst facilitation can, to some degree, prompt and remind students that there are still some incomplete activities, it is the student who has to be self-motivated enough to want to participate - online learning really is a case of the more you put in, the more you get out. Where students possess this motivation, the online discussions and learning with, from and about each other are rich; where students are not motivated, the result is a superficial but passable example of cooperative behaviour. It is likely that students are still learning with, from and about each other, but it is not openly acknowledged. For us, this is the whole crux of IPE: the need for students to be motivated to work interprofessionally, and whilst facilitators can support this, it is for each student to realise that they have a professional responsibility and duty to learn as much as possible about each other, breaking down as many barriers as possible so that in practice they can work collaboratively as a team to deliver best care to their patients/clients/service users.

Throughout the case journey, students are able to share and discuss their roles and responsibilities in relation to the events occurring in each episode. At the end of each level there is a summatively assessed piece of reflective work.

Annually, the case journeys are sent to each professional group for comments; this allows for changes to be made so that the journeys reflect current practice. With the development of specialist posts within and between professions, this can be quite difficult - for example, many case journeys will involve sub-specialties of medicine – for example, GP, Oncologist, Surgeon and so on - so each one should comment on the role of their specialty in each journey. It is also interesting to observe

how quickly the journeys date and pathways change, possibly reflecting the current climate in the National Health Service (NHS). With this in mind new learning objects are being continually developed and placed in the Centre for Interprofessional e learning (CIPeL) learning object repository which can be accessed by obtaining a username and password from the CIPeL website www.cipel.ac.uk.

Student anxieties and concerns

The most common anxieties and concerns expressed by students relate to their understanding and navigating the learning environment. Comparison of the different professional groups reveals a wide age range, different educational levels, competing demands on time – with many students having family commitments and little experience of IT.

Level 1 IPeLP is possibly the greatest challenge in terms of IT competency. With the online activity commencing within 6–8 weeks of enrolment on the course, many students are still confused by virtual environment. It is important, therefore, to ensure that IT training day/drop in sessions are available to students, so that they can be guided through the environment and feel confident in finding their discussion space and able to post their comments.

We have found, however, that irrespective of the amount of drop in sessions available there will always be some students who do not fully understand the environment. Sometimes this can be useful as an ice breaker when other students will respond to a cry for help from fellow colleagues. Subsequent IPeLP runs do not seem to have this problem, by virtue of students being further on in their training and being used to the environment.

We have also found that as Level 1 is situated at the beginning of their training many students are not completely sure of their own professional roles or responsibilities. Whilst some students feel able to share this with their colleagues, others tend to feel that they should know this or worse that students from the other professionals will expect them to know. This can result in extreme anxiety to such an extent that students stop participating online. For example, one student contacted his facilitator to raise such an issue. Talking with the student revealed that he was completely fixated on being able to explain the physiology and anatomical structures associated with a medical condition, instead of drawing on his learning to date, which involved communication skills, breaking bad news and health inequalities – all highly relevant to the particular journey.

Links to relevant sites are available for the students, which can help them fill gaps in their knowledge, and if they are on placement they can, and often do, ask more experienced colleagues any questions relating to their roles and responsibilities.

Whilst students out on placement are able to seek advice of colleagues, as well as observe what happens, there are challenges relating to the time IPeLP takes and where this is to be found - is it tied into the practice hours or does it fall within university hours? We have experienced problems with students working a 40-hour week, not being allowed to have time during their shift to go online and so having to find the time either on their days off or late in the evening. As yet, this remains an unresolved issue.

In relation to computer access in practice there were initial concerns (despite checking) that computers within the NHS would not have the necessary software to run the virtual environment. We have only experienced one trust where the computers seemed to be unable to run the software and this was resolved by use of a flying squad (telephone assistance). It is possible, however, that we have not experienced more problems with access in practice because most students are logging on at home or at the university at the end of a shift.

Assessment

Each level of the pathway is assessed – however, at three universities this assessment is summative, at the other formative. Assessment has a tendency to drive students and this is true of the pathway. The structure and content of the pathway as well as the overall aims lends itself to a reflective piece of work. At Level 1 students are expected to complete a 500-word reflective wrapper which explores their own understanding of their professional roles and responsibilities, is supported by a minimum of three of their own postings from the discussion board, as well as an exploration of one other professional group reference with postings supporting their reflections.

For those students who are classed as unsatisfactory and for whom this is a summative piece of work, there is an opportunity to resubmit once they have completed the extraordinary IPeLP run.

Students, for whom this is a formative piece of work, are advised if their piece of work would have been unsatisfactory, but as they are examined on interprofessional roles and responsibilities at the end of semester exams, there is no need for them to resubmit their work.

Equity across all professional groups in terms of assessment, access and workload has proved to be one of the biggest challenges. We have touched on the assessment being summative and formative, but perhaps a more pressing and volatile issue relates to submission deadlines. Recently due to major differences in student activity within the four universities, one professional group were given a different submission date. The students voiced their thoughts on this using the 'Ask a question' forum open to all students. The ensuing debate was mediated by the learning technologist and IPeLP leads and raised some important issues. We now realise that equity across student groups is essential – without it student prejudices and stereotypes between different professions and universities rise to the surface.

Evaluation

As with every module it is important that evaluation data is collected and used to redefine, shape and build on the scenarios and develop the pathway. Obtaining student feedback seems notoriously difficult especially when it is online. Response rates as low as 27% are not uncommon. A tip to obtain high response rates is to make it an e-activity which all students need to complete – this idea from our learning technologist resulted in response rates of over 80%.

Obtaining feedback of facilitators is just as important but it is impossible to make it an activity – so response rates, for us, tend to be low.

Our online evaluation asks students to rate, on a five-point Likert scale, ranging from strongly disagree to strongly agree, a series of statements. Space is also available for free comments.

Evaluation findings from the Level 1 IPeLP showed that the majority of students ($\geq 80\%$) agreed that interacting online with other students helped them in their studies. Working with students from other professional groups was also highly valued ($\geq 80\%$). However, getting the number and pace of e-activities is important, as only 60% agreed that the pace was correct. Using the case journey approach seemed relevant to most students, with 80% agreeing that it was relevant to their studies, as well as being interesting.

Forty per cent of students, however, perceived that the IPeLP did not significantly increase their understanding of their own professional roles and responsibilities, presumably many students felt that they did have a good understanding of their own profession even at this early stage in their career. This observation warrants further investigation given that several authors of evaluation tools have suggested that students at this

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stage in their training are not sure of their own roles and responsibilities. Against this though, over 80% of students felt that participating in the IPeLP had increased their confidence and provided them with a better understanding of the roles of other professional groups.

Facilitator feedback provides some useful information about how the students respond to the e-activities and how they work as a group. It can also provide important information relating to the amount of administration and managing the online groups and the time spent chasing non-participants. The amount of time spent online was surprisingly less than had been anticipated with most facilitators spending 2–4 hours per week, and accessing the site more than 3 times per week.

Student qualitative comments

I have enjoyed being able to gain information and other peoples view of a patient. Understanding of how important the other health team members our and how we all play important parts in the care of a patient. it worked well online as we got to interact with people via an easy source for people to use.

(4) No 482

I don't feel that I have learnt anything new about the professions. I'm not sure what stage the other students are at, but I feel that I have learnt more from qualified practicing HCP's or from later year students who are in clinical practice placements. I feel that proper IPeLP would be better suited to clinical placements where groups could meet in real MDT meetings to discuss a real patient and compare how they would manage the patient with how they have really been managed.

(1) No 690

It has been interesting to see what other students have to say on any particular matter, however I am not convinced that simply posting messages on a particular topic has been any huge benefit in terms of working as a multi disciplinary team. I think this will come from practical experiences in a clinical setting.

(1) No 108

Facilitator qualitative comments

The highlights were when the students were eventually; talking; to each other and my role as facilitator became less important to the group. When

they asked each other questions and researched the answers and then shared their findings, it was a delight. They disciplined themselves reminding each other to adhere to the posting rules. Even students who had to be reminded to maintain a tidy site, they were most polite and compliant. Late comers seemed to work hard to catch up and become involved. No real difficulties managing the groups ... Without a doubt the success depended on the level of student participation. It seems to have worked!

Respondent 1 (07)

I encountered very little difficulty this time except confirming the whereabouts of non-attendees (which got sorted eventually). The highlights were watching the group gel well and take off the discussion themselves with cohesion and respect.

Respondent 16 (07)

Actually far more effective for students than I had anticipated. It was a pleasant surprise to see perceptions and assumptions being challenged/changing in many cases. Students were also obviously surprised about this and often about their ability to access the system. Very hard with students who don't engage or answer your e-mails...horse to water etc. Also hard on other students who want to interact.

Respondent 12 (07)

I was not looking forward to this when I had finished the e-spire course as I knew that it would add to my already stiff workload. However, I enjoyed it, looked forward to reading the posts and am actually looking forward to the next run.

Respondent 4 (07)

Conclusion

The initial setting up and development of the IPeLP was a significant amount of hard work. Too few people drawn in to develop the environment at grass roots put huge pressure on those of us who were left to cope, but although concerns were raised in the initial runs regarding the integration of virtual interprofessional learning into uniprofessional curricula it is now embedding and more individuals are keen to claim some allegiance to it. The IPeLP has the advantage that it can be used with a wide range of professional groups, with large numbers of

students, irrespective of practice or theoretical placement whilst still being relevant to each student's professional development.

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