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Exploring Virtual Opportunities to Enhance and Promote an Emergent Community of Practice

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Abstract: This paper gives an account of an attempt by an educational developer to support and strengthen an emergent Community of Practice (CoP) (Wenger 1998a). This community consists of members of staff associated in different capacities with the Centre for Interprofessional e-Learning (CIPeL), a Centre for Excellence in Teaching and Learning (CETL), based at Coventry University and Sheffield Hallam University. The support is specifically targeting CIPeL Secondees who are recruited to CIPeL on a part-time basis, for the purpose of creating interprofessional Learning Objects (LOs). While Secondees receive individual support, there is little formal contact between Secondees. An online CIPeL Community site was created, in order to provide a space where CIPeL members could meet virtually and share problems and experiences relating to the construction of LOs. Initially, the key question appeared to be how online participation by members of the community could be encouraged. Using Wenger's (1998a) CoP theory of learning, and after exploring how the Community site was being used, the focus of attention shifts to an exploration of reified objects and the role they play in guiding practice, which in this case relates to the creation and use of interprofessional LOs. This in turn leads to the difficult question of how relevant reified objects may be identified and built, and it is advocated that existing CIPeL LOs should be exploited as reified objects for the purpose of guiding the construction of new LOs. It is felt that invoking constructs from Wenger's (1998a) CoP theory of learning has resulted in a more detailed picture of the nature of the challenges involved in moving from an emergent CoP to more established practice. The approach has simultaneously helped clarify how support for an emergent CoP might be more effectively focused. As a final point, it is suggested that it may be fruitful to explore parallels between CIPeL as an emergent CoP and interprofessional practice (IPP) itself, based on the view that IPP is also an emergent practice.

Keywords: Communities of practice, learning objects, interprofessional learning objects, Interprofessional Practice, community development support, Reified Objects.

1. Introduction

Coventry's involvement with e-learning goes back a full decade at this point in time. Evaluations of commercially available Virtual Learning Environments (VLEs) started in 1997, leading to the selection of WebCT for a large-scale pilot project in 1998. By the start of the academic year 1999, WebCT was rolled out institution-wide, with the intention that the online environment should be used to enhance face-to-face teaching (Deepwell and Syson 1999). This move was not simply about making use of newly available educational technologies; it was based on considerations relating to the changing nature of the student body and the implications this had for approaches to teaching and learning. The government's Widening Participation agenda (DfES 2003a, DfES 2003b) for higher education meant that some students were less prepared for studying at University, both in terms of levels of knowledge attained within their subject and more specifically, their level of command of study skills. The availability of the VLE provided new options for academic staff to respond to this situation through the provision of additional materials and learning activities online, enhancements which could not have been offered in the absence of a VLE.

These early experimentations with online provisions of learning materials and learning activities can be viewed as a tentative step in the direction of a Learning Object paradigm. Students could access available materials repeatedly and opt to work beyond the basic requirements of the module, where online material supported this. In the School of Health and Social Sciences (now the Faculty of Health and Life Sciences), the late Anne Davidson was active in championing the use of the VLE and innovative approaches to teaching associated with it. She was amongst the first to link pedagogical opportunities afforded by the VLE with Learning Object technologies. Specifically, she pioneered the development and use of interprofessional LOs in the form of authentic patient journeys which demonstrated the input to patient care by a range of different health professionals. In 2002, Davidson became Principal Lecturer in Interprofessional Case Study Development. She collaborated with colleagues from within the faculty and from the Centre for Higher Education Development (now the Centre for the Study of Higher Education) on research into learning object design. She focused further on the question of how technical aspects of LOs could be reduced in complexity in order to make broad use of them acceptable to academic staff (Courtney, Davidson and Singh 2005, Davidson and Courtney 2004, Davidson and Courtney 2006). At Coventry, these efforts may be seen as the first beginnings of a Community of Practice concerned with the development of interprofessional LOs and their use in interprofessional education (IPE).

The Centre for Inter-Professional e-Learning (CIPeL) was created in 2005. Established by the Higher Education Funding Council, CIPeL is a collaborative Centre for Excellence in Teaching and Learning, involving Coventry University and Sheffield Hallam University. Interprofessional Learning represents an important Department of Health initiative for developing the National Health Service (NHS) workforce (DoH 2000). CAIPE, the UK Centre for the Advancement of Interprofessional Education, defines multiprofessional education on its website as 'a learning process in which different professionals learn from and about each other in order to develop collaborative practice.'

CIPeL's main aim is to develop and disseminate solutions to the barriers to interprofessional learning. Its focus is on innovative approaches to interprofessional learning which exploit new pedagogies and new technologies. Strong emphasis is placed on e-learning, coupled with the development and use of interprofessional Learning Objects (LOs). Both Coventry University and Sheffield Hallam University have an established tradition in this area and are thus able to build on research and developments that have taken place in the past.

This drive for a new pedagogy in supporting interprofessional learning is at the heart of CIPeL's agenda. Its approach is to offer funding to academic staff who wish to develop an interprofessional LO on a part-time basis. These LO developers are referred to as *Secondees*. Once a proposal for building a LO is accepted, *Secondees* are supported in their task by a number of professionals, including a member of CIPeL staff who will act as a mentor, a critical reader and a learning technologist.

Promoting the design and construction of interprofessional LOs is one of CIPeL's main foci. A second one is concerned with the development of a learning object economy in the area of interprofessional learning. To this end, it is in the process of establishing a repository which will hold interprofessional LOs that will be made available to a wider community, both within and beyond the two universities involved with CIPeL.

A third strand of CIPeL's work is concerned with research relating to the development of a learning object economy that is specific to interprofessional learning. Its research and evaluation strategy (CIPeL 2006) lists, among other items, the following research questions:

- What is the nature of the relationship between learning object and learning activity?
- How does learning object complexity impact on its use and reuse?
- What makes for a successful learning object/activity?
- How can learning object reusability be strengthened?
- What models can be developed to understand the impact of learning objects on learning?

CIPeL's concerns are thus varied and complex. Its efforts are located at the intersection of a number of domains which may separately be characterised as innovative, emergent or challenging. The interprofessional practice agenda in health care is one of these. Teaching interprofessional practice adds another layer of innovation on top of the practice agenda. The development and use of LOs remains a domain of great complexity (Parrish 2004). Initialising a repository through defining and setting up an appropriate metadata schema and then populating it with interprofessional LOs represents a substantial challenge in its own right. A whole range of technologies are implicated in achieving CIPeL's multiple and interrelated objectives. Therefore, those who contribute to the CIPeL's enterprise work in a highly complex environment, well beyond their comfort zone. All of this makes the need for the provision of support for this community of practitioners substantial.

2. The CIPeL community site

2.1 The need for an online community space

Secondees either work individually or in pairs on a CIPeL project towards the production of an interprofessional LO. They work within a team, insofar as each project has the support of a staff member from the CIPeL core team, of a critical reader and of a learning technologist. This is using McDermott's definition of teams, which states that 'A team is a group of people with a common goal, interdependent work, and joint accountability for results' (McDermott 1999:2). However, there is generally little connection between the different *Secondee* projects, even though they are likely to encounter similar problems, and insights gained along the way by *Secondees* are of potential benefit to their peers. On this basis, it seems

appropriate to view CIPeL Secondees and those who support them as an emergent Community of Practice (CoP) (Wenger 1998a).

The collaborative aims between teams and communities of practice differ in important ways. McDermott simply defines a CoP as 'a group that shares knowledge, learns together, and creates common practices' (McDermott 1999: 3). Wenger contrasts teams and CoP as follows: 'In their teams, they take care of projects.... A community of practice exists because it produces a shared practice as members engage in a collective process of learning' (Wenger 1998b: 4).

One of the isolating factors for CIPeL Secondees is that they are busy academics with little time to spare for non-essential tasks. This makes arranging face-to-face community meetings problematic. In order to overcome this hurdle, the idea of an online community space was proposed, which would enable members to meet virtually, as well as asynchronously. Apart from giving Secondees the option to have additional online meetings with members of their support team, this online space is primarily proposed to provide a meeting place for the CIPeL community as a whole. The online site is a password protected space, accessible only to members of the CIPeL community (and on occasion, invited guest). It thus proves a safe and secure place for making early versions of interprofessional LOs available to the community for viewing and for giving members the opportunity to offer feedback.

However, visiting this online space remains an optional extra for members and hence it is unrealistic to expect that online participation will simply happen. Therefore, how might online participation be encouraged? How could one get to the stage where there is a critical mass of participation that ensures the site's status as a worthwhile place to visit? In the early stages of the CIPeL Community site project, this seemed the most urgent and the most difficult question to address. Various strategies were used to encourage participation, such as opening up the site to CIPeL staff first, enabling and inviting them to seed discussion topics, promoting the site during face-to-face CIPeL events, sending out invitations to community members via email and seeking to create an online space that has a clear structure, is user-friendly, offers relevant content and provides a range of opportunities for member to contribute.

2.2 Structure and usage

The CIPeL community site makes use of Coventry University's Virtual Learning Environment (VLE), the Vista Enterprise Blackboard Learning System™. This ties access to the Community site to a software environment most members use on a daily basis for teaching purposes. Fig. 1 shows the Homepage of the CIPeL Community site. It provides entrance points to various sections of content and activities. It incorporates an image of members at a CIPeL event; this is an attempt to 'personalise' the space and explicitly link it to its intended audience.

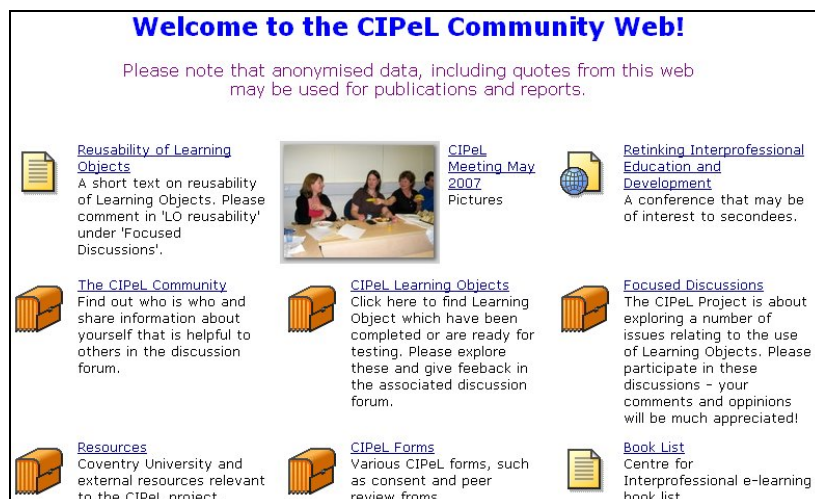


Figure 1: The CIPeL community homepage

The CIPeL Community site, including its Homepage, evolves and changes over time. Some of the items it contains are regarded as key elements, such as:

- **A page for holding CIPeL Learning Objects:** This page contains a growing list of links to early versions of interprofessional LOs which have been produced for CIPeL. Each LO is associated with a dedicated discussion forum where members of the community can comment on the LO and offer suggestions.
- **A page for holding information about members of the CIPeL Community:** Since members are geographically dispersed and largely employed on a part-time basis, an important function of the site is to help members know who else is in the community and what role they play within it. All new members are invited to introduce themselves, using a discussion forum. The page includes a link to the CIPeL's website which is itself evolving. The website provides details about staff who are involved with CIPeL, including their role, and where applicable, a brief summary of their project.
- **A page for focused discussions:** This contains links to a range of separate discussion topics, each focused on an aspect of LO design or use. These discussion topics are aligned with research questions taken from CIPeL's research and evaluation strategy (CIPeL 2006).

Items which were either added to the CIPeL Community site at a later stage or seemed more peripheral at the design stage (but see conclusions drawn in this paper!), include:

- A report on recommendations for structuring LOs with the aim of increasing reusability
- A list of conferences that may be of interest to CIPeL users (updated monthly)
- Links to relevant Internet resources
- A reading list of articles and books relevant to the community
- A list of links to assorted CIPeL documents and forms

It is surprising how dynamic CIPeL's affairs are; nothing stays still for any length of time. New Secondees join, new projects are taken on board, members of staff may leave and others join. Meetings are held and decisions are made, new documents and guidelines are produced or are under discussion. Progress is made on individual Secondee projects and so is work on setting up the repository. Mile stone events, such as the CIPeL Repository Launch, held at on 26th November 2007 at Coventry University, are prepared for, come and then go, leaving ripples behind. Hence it is only possible to provide a snapshot of CIPeL relating to a specific point in time.

With the question of participation in the CIPeL Community site in mind, some of the available online tracking data was explored in order to gain a broad picture of usage. The data was collected on 1st August 2007, when the total number of users registered on the site was 64. This included some guest accounts. At that time, the online space had not existed for very long. The site had been made available to CIPeL core staff in January 2007, and Secondees were given access from early March 2007 onwards. The following figures emerged from the tracking data:

- 29 of a total of 64 user had never accessed the site
- The remainder had accessed the site an average of 6 times
- The total number of discussion postings read was 1389
- The total number of discussion postings sent was 87
- Web links had been followed up a total of 60 times
- Folders had been visited a total of 667 times
- Files had been accessed a total of 255 times

A cursory glance at these figures shows that the number of discussion postings is low, while in contrast, most of the other figures are comparatively high or even very high. Invitations to post to discussions had included a range of options. Members who were new to the online space were invited to introduce themselves online. They were invited to look at available versions of CIPeL LOs and then offer comments. Finally, they were asked to contribute to a number of discussion topics focusing on research questions of relevance to the CIPeL. The discussion topics associated with Learning Objects scored very low in terms of postings, some of the theoretical discussion topics did rather better, but the most frequently used topic related to personal introductions by members.

2.3 Exploring factors that influence participation

In June 2007, a questionnaire had been used in order to probe underlying reasons for online participation in the CIPeL Community site. The questionnaire was developed using SurveyShare™. It was sent out via email to 44 members of the CIPeL Community and recipients could complete it anonymously and online. Ten questionnaires were returned. The questions were designed to explore members' attitudes in relation to interprofessional learning and the usefulness of introducing LOs into mainstream teaching practice. If there was a lack of interest in these areas, then participation in the Community site was unlikely to be of interest. A key question aimed to uncover what percentage of work time a member was able to devote to his or her CIPeL project. Clearly, if the time factor was very low, then it would be unlikely that optional online participation would be a priority for them. Other questions were designed to probe members' reasons for visiting the online space. Hence the survey used one set of questions aimed at uncovering whether an individual's contextual conditions were such as to rule out likely participation and a second set of questions which explored more narrowly what kinds of local conditions or reasons made participation likely. The questionnaire contained 10 questions, covering the following issues:

1. What percentage of time people were able to devote to CIPeL
2. Whether members saw interprofessional learning as an important agenda
3. Whether members thought the use of LOs would increase in importance in the future
4. The importance they attributed to technical support for their project
5. The importance they attributed to peer support in relation to their project
6. The importance of access to pedagogical advice in developing and using LO's
7. Their views on the aim and purpose of the CIPeL Community Site
8. What kinds of support they would like within CIPeL that is not currently available
9. What their key insights are after participation with CIPeL
10. What challenges they see regarding the development and use of LOs

It would clearly have been desirable to have more responses to the survey. However, the responses received, coupled with the tracking data, proved really useful to the author. Some questions required a five-point Likert scale response, where the options were: Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree. The survey responses may be summarised up as follows:

(1) Three people indicated that they gave 0-5% of their time to CIPeL. Five participants devoted between 6 and 25% of their time to CIPeL. Two others gave between 50 and 100%, which suggests that they are CIPeL core staff.

[Response options were: 0-5%, 6-10%, 11-15%, 16-20%, 21-25%, 26-30%, 31-50%, 51-75%, 76-100%]

(2) Eight people agreed or strongly agreed that the interprofessional learning agenda was important, but two were undecided about this.

[Likert scale responses]

(3) Nine respondents indicated that they believed that Learning Objects would increase in importance in the future, but one was undecided.

[Likert scale responses]

(4) All participants agreed or strongly agreed that technical support is important.

[Likert scale responses]

(5) Six respondents agreed and four strongly agreed that peer support is important.

[Likert scale responses]

(6) Six respondents agreed and four strongly agreed that pedagogical advice on the development and use of LOs is important.

[Likert scale responses]

(7) Responses to the question about the aim and purpose of the CIPeL Community site strongly echoed the reasons for which the site was set up.

[Free text responses]

(8-10) Responses to the final three questions indicated that in general, participants found the task of creating LOs challenging, that they found it more difficult than anticipated and that they would welcome more support than they were actually receiving.

[Free text responses]

At this point, it is worth noting that responses indicate that all forms of support were generally welcomed, including peer support. Responses to the question as to the aim and purpose of the CIPeL Community web echoed most of the reasons for which it had been set up. These included 'discuss and exchange ideas', 'share experience and expertise' and 'share and learn from each other'.

3. Discussion

The fundamental research question addressed in this paper is how an emergent CoP might be nurtured and supported. The assumption was made that the provision of a dedicated, well-structured online space would provide a basis for community growth and development, achieved through participation and knowledge sharing of its members. This brought into focus the narrower question of how members of the community might be encouraged to participate in online discussions. There was a belief that if this could be achieved, then this emergent CoP would be strengthened, to the benefit of all concerned. For example, it was hoped that this would have the potential effect of helping Secondees progress more smoothly and more quickly with their respective LO projects and that the accumulation of insights relating to LO construction and use would shed light on some of the theoretical questions of concern to CIPeL.

Wenger's (1998a) Community of Practice theory of learning appears to offer conceptual tools to help make sense of how CIPeL Secondees and those who work with them function as a community. Furthermore, the application of the CoP theory to this context holds out the promise of opening up a vision for a way forward in supporting members of the community more effectively, helping them become a more cohesive community with a shared practice and a shared repertoire (Wenger 1998a: 82) of communal resources.

The concept of 'peripheral participation' (Lave and Wenger 1991: 29, Wenger 1998a: 100) relates to newcomers in the community, who learn the details of engaging in the practice from more established members, particularly where situations are ambiguous or unusual. Each new Secondee represents a newcomer in relation to the CIPeL community. As academic members of staff, they are likely to have engaged in online teaching and are also likely to have produced online materials for the courses they teach. However, it is unlikely that many have focused on the issues surrounding re-usable LOs, because this has not previously been a requirement. Of course, there are Secondees who have already completed their project, but they have no obligation to work with newcomers, whose projects, in any case, are likely to be very different from their own. Hence, the newcomer does not have the luxury of being able to draw on an established community of practice to guide them in their task.

The need to identify and incorporate new insights into well-rehearsed ways of working is very much present in an established CoP (Wenger 1998a). However, the *emergent* CoP needs to have a stronger focus on garnering and refining new knowledge, gained by members on the basis of engaging in tasks relating to the new domain of practice. This was one of the main reasons for setting up an online community space for the group: to enable all members to share emergent knowledge and insights in relation to the CIPeL's enterprise.

Wenger (1998b) has explored the development phases of communities of practice in some detail. He names five stages of development: *potential*, *coalescing*, *active*, *dispersed* and *memorable*. Potentially, all of the first three stages apply to some degree to CIPeL as a CoP. Ambiguity is due to the fact that new members are joining this community over time comparatively frequently and that some members, but not all, already know each other from another context. According to Wenger (1998b), typical activities for a CoP at the *potential* stage include 'finding each other' and 'discovering commonalities'. At the *coalescing* stage, we are looking at 'exploring connectedness, defining joint enterprise, negotiating community'. At the *active* stage, there is 'engaging in joint activities, creating artifacts, adapting to changing circumstances, reviewing interest, commitment and relationships'. Most of these activities seem to be happening concurrently within the CIPeL community, but perhaps the degree to which they are present needs to be stronger.

One obstacle which stands in the way of achieving the *coalescing* and *active* stages more fully lies with the fact that Secondees as well as critical readers have many other commitments, through being members of other communities of practice. Wenger (1998a, 1998b) emphasises that it is common for people to belong to multiple communities of practice. The fact that Secondees have chosen to work with CIPeL signals their interest in developing an interprofessional LO. But restrictions on the time available to them during which they can devote themselves to this task limits to what extent they are able to engagement with the associated community of peers. The time pressures are such that Secondees are often hard-pressed simply to find time to focus on their CIPeL project. Therefore, engaging with the CIPeL community, over and above involvement with their project, becomes a low priority.

A second conceptual tool from the CoP theory to be considered is that of a 'reified object' (Wenger 1998a). By way of a shortcut, the following quote may stand as a definition:

I will use the concept of reification very generally to refer to the process of giving form to our experience by producing objects that congeal this experience into "thingness". In so doing, we create points of focus around which the negotiation of meaning becomes organized. Again my use of the term reification is its own example. I am introducing it into the discourse because I want to create a new distinction to serve as a point of focus around which to organize my discussion. Writing down a law, creating a procedure or producing a tool is a similar process. A certain understanding is given form. This form then becomes a focus for the negotiation of meaning, as people use the law to argue a point, use the procedure to know what to do, or use the tool to perform an action. (Wenger 1998a: 58)

The existence of reified objects in a given domain, similar to the notion of peripheral participation, implies that the CoP has existed for a reasonable period of time. It implies that there has been time for the community to have formalised key elements of a work process, for example, through the creation of input forms or templates (Deepwell and Courtney 2007). These reified objects have the power to help participants make decisions in line with current practice and generally provide orientation and guidelines.

Focussing on this aspect of a CoP, it becomes clear that reified objects are a key ingredient of effective practice in a professional domain. An emergent CoP is hindered in its practice by the fact that the practice has not been established long enough to allow for the development of a sufficient number of reified object to emerge or that existing reified objects are not sufficiently refined to help guide domain-level actions.

Could it be then, that encouraging and supporting an *emergent* CoP needs to be more concerned with the task of accelerating and refining appropriate reified objects and that communication and exchange of ideas cannot realistically be expected while the availability of reified objects is sparse? One of the responses from the survey appears to express frustration at the lack of reified objects:

Question: *"Following your participation in CIPeL, what are your key insights with regard to the creation/use of LOs?"*

Answer: *"Lack of understanding of the dilemmas and decisions required to create an LO. ...The need to debate the definitions of LO."*

Key phrases here are 'lack of understanding', 'dilemmas and decisions' and the demand for a debate on the definitions of LOs. Why should definitions matter? The answer is that a definition of LOs provides essential guidance to the person who has taken on the task of building one. Some commonly accepted definitions may not be helpful for the purpose of guiding the construction task. For example, Wiley's widely quoted definition of an LO as 'Any digital resource that can be reused to support learning' (Wiley 2000: 7), and indeed the definition broadly embraced by CIPeL, enables us to decided whether a given object may be classed as a LO, but it has little generative power for guiding LO design. This survey response encapsulates a plea of some intensity for more orientation, more help and guidance, in order to be able to sensibly address the task that of creating a LO.

It now becomes apparent that the tracking data suggests a similar story. Members who have visited the CIPeL Community site have posted comparatively few comments, but they seem to have been very busy reading any available discussion postings, and they have shown considerable interest in the CIPeL documents presented online. Does this indicate a search for information, for gaining insights as to what others do in this domain, for hints as to what might be expected behaviour, and so on? It may be unreasonable to expect contributions to discussions in the context of an environment that is characterised by uncertainty and a lack of orientation.

This analysis suggests that it is extremely worthwhile to focus on guidelines, strategies and accepted definitions, in fact any document that contributes towards the process of streamlining the selection, support, quality assurance aspect and evaluation of Secondee projects. These documents, if provided in sufficient numbers and sufficient detail, will help the Secondees to progress while avoiding unnecessary searches and false starts. The need to present forms and guidelines coherently to Secondees has been addressed in the creation of a Secondee handbook that places key CIPeL documents under one cover. This is an effective way of ensuring that Secondees are aware of available guidelines and who they can turn to for support or advice.

However, the problem is that there remains much that is of relevance to Secondees that is either tacitly assumed or stated in documents that do not intercept the workflow. There are so many really big questions that come into play for the Secondee. What is a Learning Object? What makes an LO interprofessional? Explanations which satisfy people in a general sense may prove of little use when it comes to the task of constructing LOs.

What we are discovering here is that the problem with emergent communities of practice is that the reified objects which would normally guide activities at the domain level are themselves still under construction. This is akin to having to work at the domain level and at its meta level at the same time. It is difficult to guide the construction of interprofessional LOs, because the meta level, containing the community's reified objects, is still sparsely populated at this stage and remains incomplete.

This line of inquiry suggests that emergent communities of practice need to focus on the creation and refinement of practice-specific reified objects. It is not easy to know what these objects may look like. Forms and guidelines have already been mentioned. Fortunately, there is an available source of reified object even in an emergent practice, in the shape of examples of existing objects at the domain level. This is widely recognised, and accounts for the demand and popularity of examples of 'best practice'. Others can learn from such examples, abstract essential features and use these to guide actions in their own sphere of work.

For CIPeL, this means that all existing CIPeL LOs have a dual purpose. The first is that they function as an interprofessional LO and thus support interprofessional learning. However, when used as a reified object, they can inform the LO construction process itself. This represents learning from example – potential designers will be quick to grasp essential features of a sample LO that may be replicated in a modified form.

An interesting point to consider is that the LOs which are produced by the CIPeL community represent reified objects in the context of interprofessional learning. The LOs are used to help students understand what interprofessional practice means. This suggests that there is a close relationship between the concepts of an LO and that of a reified object. The nature of this relationship cannot be pursued here, but emerges an interesting topic for future research.

It is also possible and worthwhile to draw parallels between the CIPeL community as an emergent CoP and the much larger domains of interprofessional practice and interprofessional education. IPP is an emergent practice, a fact which is very much reflected in the literature. The number of newcomers to IPP is large; it does not just encompass students and newcomers to health care as such, but includes many who are currently practicing in a health care capacity. Multiple theories of learning have been invoked (Colyer, Helme and Jones 2005) in the attempt to impose structure on this large and complex domain and help us understand the task of transforming patient care to meet IPP criteria and standards. However, Wenger's (1998a) CoP theory surely needs to take pride of place, since it addresses issues so central to both IPP and IPE, given its focus on how people work and learn together, while highlighting shared practice and the key role of reified objects.

4. Conclusions

This paper traces an attempt to support CIPeL Secondees and those who work with them towards forming a CoP for the mutual benefit of its members, via the provision of an online CIPeL Community site. In this account, the underlying questions have shifted from "How can an emergent CoP be supported?" to "How can online discussion and participation be encouraged" and then onto "What do reified objects look like with respect to the CIPeL CoP and how can some of these be constructed?"

Somewhere along the way there was a suggestion that perhaps it was naïve to expect online discussions from members, in the absence of what turn out to be key orienting features for any CoP, namely a sufficient

number of reified objects relating to the practice. It feels very much like a chicken and egg thing: it seems we cannot have one without first having the other, and vice versa.

In his book 'Communities of Practice', Wenger (1998a) strongly emphasises what he calls the complementarity of participation and reification:

Participation and reification cannot be considered in isolation: they come as a pair. They form a unity in their duality.To understand one, it is necessary to understand the other. To enable one, it is necessary to enable the other. They come about through each other, but they cannot replace each other. It is through their various combinations that they give rise to a variety of experiences of meaning (Wenger 1998a: 62).

This line of inquiry has brought into sharp focus the importance of the role reified objects pay for communities in an emergent field of practice. Identifying different types of reified objects and the exploration of ways of speeding up the construction of such objects in an emergent field of practice are now viewed as important questions for future research. Examining domain-level objects for their value as a reified object presents itself as another urgent task. For CIPeL, this means taking a careful look at the interprofessional LOs currently in its collection. Some of these, for example the patient journeys, exist as a set of LOs made to one underlying format. But there are other objects, less easy to replicate with new content perhaps, that need to be explored for their potential value as a reified object.

It has further been suggested that the CIPeL experience recounted here may have parallels in the wider contexts of both IPP and IPE. There is no space to explore this further here; this must be left as a question for future research.

Above all, it is felt that the conceptual tools embodied in the Community of Practice theory of learning offered by Wenger (1998a) and Lave and Wenger (1991) have proved extremely useful in making sense of a rather complex scenario. Further explorations along similar lines seem well justified.

References

- CIPeL Website, [Online] Available: <http://www.cipel.ac.uk/> [21/01/08]
- CIPeL (2006) CIPeL Research and Evaluation Strategy. [Online], Available: <http://www.cipel.ac.uk/research/documents/CIPeLResearchandEvaluationStrategy.doc> [21st Jan 2008]
- Colyer, H., Helme, M. and Jones, I. (Eds.) (2005) The Theory-Practice Relationship in Interprofessional Education. Higher Education Academy Health Sciences and Practice. [Online], Available: <http://www.health.heacademy.ac.uk/publications/occasionalpaper/occ7.pdf> [21st Jan 2008]
- Courtney, K., Davidson, A. & Singh, G. (2005) 'A practical approach to learning objects based on IMS Content Packages.' Paper presented at 4th Annual WebCT European Conference, Barcelona, 6-9 Feb.
- Davidson, A. & Courtney, K. (2006) 'Empowering for interprofessional learning.' Paper read at 5th Annual WebCT European Conference, Edinburgh, 27 Feb -1 March.
- Davidson, A. & Courtney, K. (2004) 'Using and Re-using electronic Patient Case Studies to promote interprofessional learning.' Paper read at 3rd Annual WebCT European Conference, Amsterdam, 16-18 Feb.
- Deepwell, F. & Courtney, K. (2007) 'Envisioning Potential: Stories of Networked Learning Designs from a UK University'. In Heilesen, S. & Siggaard, S. (Eds). *Designing for Networked Communications: Strategies and Development* London: Idea Group Publishing
- Deepwell, F. & Syson, A. (1999) 'Online learning at Coventry University: you can lead a horse to water' *Educational Technology & Society* 2, (4) 122-124
- DfES (2003a) *The Future of Higher Education*. White paper, [Online] Available: <http://www.dfes.gov.uk/hegateway/strategy/hestrategy/foreword.shtml> [21st Jan 2008]
- DfES (2003b) *Widening Participation in Higher Education*, [Online] Available: <http://www.dfes.gov.uk/hegateway/uploads/EWPparticipation.pdf> [21st Jan 2008]
- DoH (2000) *A Health Service of All the talents: developing the NHS Workforce*. Department of Health. London: HMSO.
- Lave, J. and Wenger, E. (1991) *Situated Learning. Legitimate peripheral participation*, Cambridge: University of Cambridge Press.
- McDermott, R. (1998) "Learning Across Teams: The Role of Communities of Practice in Team Organizations", *Knowledge Management Review*, May-June 1999, 32-36, [Online] Available: <http://home.att.net/~discon/KM/Learning.pdf> [21st Jan 2008]
- McDermott, R. (1999) 'Learning Across Teams: How to build communities of practice in team organizations', *Knowledge Management Review*, May-June 1999, [Online] Available: <http://www.kunnskapsnetverk.no/C14/C10/CoP/Document%20Library/Learning%20Across%20Teams.pdf> [21st Jan 2008]
- Parrish, P.E. (2004) 'The Trouble with Learning Objects', *ETR&D* 52, (1) 49-67

- Rogers, E. (1995) *Diffusion of Innovation*. The Free Press, New York.
- Sills, M. (2005) 'Moving to a New Place: some reflections on theory that underpin IPE.' In Colyer, H., Helme, M. & Jones, I. (Eds.) *The Theory-Practice Relationship in Interprofessional Education*. Higher Education Academy Health Sciences and Practice, [Online] Available: <http://www.health.heacademy.ac.uk/publications/occasionalpaper/occ7.pdf> [21st Jan 2008]
- Wenger, E. (1998a) *Communities of Practice - Learning, Meaning and Identity*. Cambridge University Press.
- Wenger, E. (1998b) 'Communities of Practice. Learning as a social system', [Online] Available: <http://www.co-i-l.com/coil/knowledge-garden/cop/lss.shtml> [21st Jan 2008]
- Wenger, E., McDermott, R. & Snyder, W. (2002) 'Seven Principles for Cultivating Communities of Practice.' [Online] (online excerpt) Available: <http://hbswk.hbs.edu/archive/2855.html> [21st Jan 2008]
- Wiley, D. A. (2000) *Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy*, [Online] Available: <http://reusability.org/read/chapters/wiley.doc> [21st Jan 2008]