

Communities of Practice; Facilitating Teacher Professionalization in Higher Education

Donald C. Ropes, INHOLLAND University, The Netherlands

Introduction

The changing landscape of higher education

As a teacher in a University of Professional Education in the Netherlands, I work in an environment that is rapidly changing. There is, firstly, a change in the fundamental way in which education is provided. The days of standing in front of a lecture hall full of busily-scribbling students is giving way to the teacher as coach, as mentor and as process supervisor. Exams are no longer written exercises testing a student's knowledge about a particular subject or theory learned from a book or lecture. Assessments are now structured reflections on competences gained during the project-based educational experience, as expressed through *beroepsauthentiek producten*, which translates as 'simulated authentic professional products' (Hezemans and Ritzen 2002). These changes in the pedagogical framework, as manifested in competence-based learning, distance learning, blended learning, e-portfolios, communities of learners, etc. are forcing a transformation in the didactical approach of teachers (Bieshuizen 2004).

The second change that I am experiencing is in the organization where I work. Higher educational institutions are being required to function more and more as competitive organizations, much like in the private sector. This means that they are subject to the demands of the new economy, which stresses knowledge building and innovation as the main drivers for success (Senge 1990). Changes of this order require several alterations to the current system. First, faculty must be approached by management in a different way than was previously the case. Lecturers are now seen as human resources that can be used to meet the goals of the institution, rather than teachers working only in the educational process. For example Inholland is developing external sources of revenue such as contract education, founding research centers, and promoting contact with small and medium enterprises for

commercial gain. These are just a few examples of activities where faculty is expected to take part in. This places different demand on the competences and professionalism of faculty. Further, Inholland University has recently instituted a balanced scorecard management system, which requires that faculty and staff are assessed according to their contribution to the strategic goals of the institution (Kaplan and Norton 1992). This is complete with formalized individual development plans that are linked to the (desired) core competences of the university - a major change from being judged on publications, speaking engagements and student satisfaction, the traditional measures of success.

Finally, there has been a trend toward mergers among universities of professional education here in the Netherlands. These mergers are often a source of uncertainty surrounding job security, curricula changes, and other factors, and can place an inordinate amount of stress on faculty within the merging organizations.

In summary, universities of professional education here in the Netherlands are undergoing changes in two regards - didactically and organizationally. This paper focuses on the latter concept in regards to teacher professionalization, or how teachers can learn to function in an environment that is becoming more and more professional. External factors such as lower government funding, higher student numbers and stronger competition has forced universities to become more like organizations one finds in the private sector, where communities of practice have for some years been recognized as an exceptional knowledge management method for organizations wishing to stimulate learning and innovation among its employees (Fox 2000, Hakkarainen, Paavlova and Lipponen 2004b, Hinds and Pfeffer 2003). Higher educational institutions are now recognizing knowledge management as an important strategic tool in helping the change process

and stimulating innovation, and communities of practice are starting to be formed as one result.

In the next section, I discuss the conceptual framework surrounding CoPs and how modern organizations in the private sector use them in order to remain competitive. I will then relate this to the educational sector and in conclusion explain some implications for the future of CoPs in higher education.

Communities of practice - conceptual framework

Introduction

Jean Lave and Etienne Wenger first coined the term "Community of Practice" in their book entitled *Situated Learning: legitimate peripheral participation*, in which they studied five groups learning behaviors (Lave and Wenger 1991). What they found was that people learn in a social context through continuous interaction. Learning, it was discovered, was no longer a dyadic function between a teacher and a pupil, but is an experience, or process, wherein many different actors play a role. Their observations of quartermasters, meat-cutters and three other communities helped to show that newcomers to a field learned to become professionals by functioning in a community of practitioners of mixed expertise, or a community of practice. Diagram 1.1

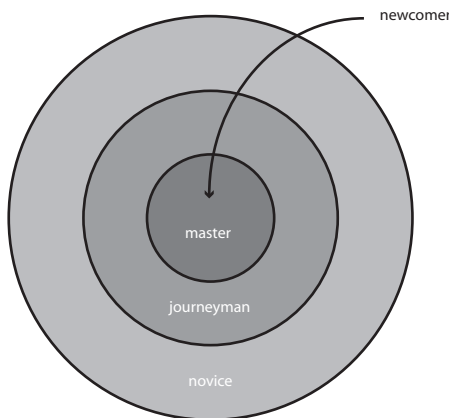


Figure 1 Learning to be a professional

illustrates this learning path graphically.

Learning, according to Wenger (1998), is an ongoing process that has four elements that are interdependent and intertwined; meaning, practice, community and identity. The following table explains these concepts.

Table 1.1 Explanation of Wenger's Elements of Learning (1998)

Meaning	A way of talking about our (changing) ability-individually and collectively-to experience our life and the world as meaningful.
Practice	A way of talking about the shared historical and social resources, frameworks, and perspectives that can sustain mutual engagement in action
Community	A way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence.
Identity	A way of talking about how learning changes who we are and creates personal histories of becoming in the context of our communities.

What CoPs are (and are not)

At first glance CoPs might appear to be like other, more traditional groups found in organizations, but this is misleading. The two major differences between traditional

groups and communities lie in the concepts of self-organization and end-results (Dekkers et al. 2005) For example, a project team might learn collectively in similar ways to a CoP, yet project groups are formed by management in order to achieve specific goals formulated in respect to deliverables, or actually produce products. Members of a project team are thus expected to take an active role in the team so that the team as a whole can produce a pre-specified end result. CoPs on the other hand, are made up of voluntary actors who decide their own learning agenda, and determine what course the CoP takes. In contrast to a project group, the organizational structure of a CoP is not formalized by management, but by the CoP itself – it is self-organizing. Knowing the differences between CoPs and other organizational groups is quite important for the success of CoPs because of its organic nature (Smith and McKeen 2003).

CoPs and higher education

A review of the literature showed that there is little published about CoPs in higher education. Furthermore, there is little general exploratory and no empirical research into the knowledge management consequences related to CoPs in public institutions. However, there is a substantial corpus of work about CoPs as a knowledge management tool in the private sector (Davenport and Prusak 1998, Hakkarainen et al. 2004a, Ray and Little 2001, Saint-Onge and Wallace 2003, Schwen and Hara 2003, Smith and McKeen 2003). Thus, I turn to this source in order to understand how and if CoPs can be successfully initiated into higher education organizations.

CoPs in private organizations are cultivated in order to improve its competitiveness in the market place through investment in learning at the individual level (Davenport and Prusak 1998). The conceptual framework for CoPs as an organizational learning tool can be seen as follows: Learning, according to (Hakkarainen et al. 2004a), originates with the individual in the sense that a gap exists between one's mental model and new information or experiences. Thus, a problem arises. This gap is then explicated by the individual through dialogue, so that the group is able to understand the individual's problem. Thus, the learning gap becomes, in essence, one for the whole group. Once this gap is closed, usually through dialogue or other types of work forms meant to help the group-learning process, we can say that both the group and the individual have learned. However, at this point, we can not speak of real organizational learning – it remains in the domain of the CoP. We can only speak of organizational learning once the new knowledge – in the form of solved problems, innovation or new processes – is somehow injected into the organization itself, where it is used by others either in their daily duties or is adapted as an institution or guideline for the organization (Stahl 2000). The process of integrating new knowledge into the organization – organizational learning, in other words - is one of communication and can take two forms (Ropes 2005). New developments are either reified in documents that are made available to others in the organization through can either through codification, where one can think of depositing a document in an organization's data bank so that it can be recalled or through the individual himself (Hansen, Nohria and Tierney 1999). Diagram 2.1 below shows the organizational learning process by portraying this link between the individual, the CoP and the organization.

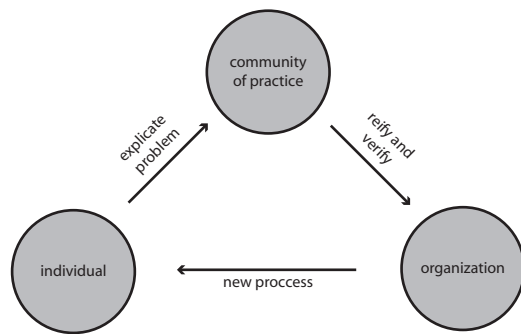


Figure 2 Organizational Learning via CoPs

Thus, communities of practice are one way of promoting organizational learning as well as systematically managing knowledge in a rapidly changing business world where highly contextual and complex problems need to be quickly solved, or innovation must occur at a rapid pace in order to remain competitive (Gaines 2003; Kayworth and Leidner 2003; Nonaka and Takeuchi 1995). However, CoPs are organic in nature and often difficult to cultivate. In the next section I discuss some practical concepts surrounding communities of practice and then attempt to place these into the context of higher education. Afterward, I discuss these points in the context of a case study.

Communities of practice often fail due to problems that can arise at three levels; organizational, community and individual or member level. The three bullets below reflect several critical success factors emerging from the literature, divided according to these three levels. I elaborate briefly on each one of these points below. Later, when I examine the case study, I use this structure to frame the discussion on CoPs in higher education.

- The organizational level, where such problems can arise such as lack of funding (Saint-Onge and Wallace 2003), lack of recognition (Wenger, McDermott and Snyder 2002), too much involvement by management (Brown and Duguid 2000; Smith and McKeen 2003) and organizational issues in regards to culture, infrastructure, etc. (Kayworth and Leidner 2003)
- The community level, at which problems can arise such as lack of interest (Blunt 2003), poor management (Saint-Onge and Wallace 2003), lack of coordination and facilitation (Wenger 2001), poor internal communication processes (Sunwolf 1999) and no sense of community (Sharrat 2003)
- The individual, or member, level, where motivational and cognitive aspects of knowledge sharing form barriers to success (Davenport and Prusak 1998; Hakkarainen et al. 2004a; Hinds and Pfeffer 2003).

Critical success factors at the organizational level

A review of the literature brought me to the conclusion that without support from management, the difficulties surrounding the cultivation of CoPs are too great to be overcome, and the CoP fails (Saint-Onge and Wallace 2003). Management can support CoPs in two ways; financially, through allowing budget to specifically allotted to the CoP and intangibly, through recognition, autonomy, etc. (Dekkers et al. 2005) However, if management becomes overly involved in the CoP, it often fails (Smith and McKeen 2003).

The organization itself, including such aspects as structure, culture and communication processes is another factor

that can negatively affect the processes of cultivating CoPs (Kayworth and Leidner 2003). Wenger and his colleagues cite two different types of organizational barriers that lead to problems when implementing or guiding CoPs; the first type they refer to as "...perennial organizational dysfunctions" such as "irrational politics", short term orientation and focus on individual performance (2001, p155-156). The second type of problem considers that CoPs are difficult to manage because they add another form of complexity to the organizational structure.

A network-type organizational structure lends itself to the cultivation of CoPs better than a strict hierarchical one. Furthermore, participative organizations, in which a culture of trust is present and communication is between all levels, are more conducive to CoPs than an exploitative-authoritative system (Harris 2002).

Community level failure

Without proper coordination, which includes management of the community's resources, and facilitation from the coordinator, a CoP stands a chance of failing. (Saint-Onge 2003). The concept of an organic entity holds true at this practical level – without proper cultivation, the CoP will probably fail.

Concerning the communication within a CoP, which is of great importance, research has shown that certain interventions should be used. These are designed to help small group communication function better. Unstructured, informal communication has been proven to be much less effective than structured group processes (Sunwolf and Seibold 1999).

Sharrat and Usuro hypothesized that knowledge-sharing will be facilitated by a high level of "sense of community", or SoC (2003). The concept of SoC is based on factors such as trust, mutual feelings of respect and a shared learning agenda. Wenger (2001) writes that SoC is very important because "...learning is a matter of belonging, as well as an intellectual process, involving the heart as well as the head." (p. 29). Thus, community building social initiatives that promote member interaction play an important role in a successful CoP.

Individual aspects of failure

Davenport and Prusak propose that people are adverse to sharing knowledge because of competitive reasons, i.e. the knowledge as power concept (1998). Hinds and Pfeffer (2003) found that workers do not share information because of cognitive reasons and time constraints.

In order for a community to work, members need to be able to explicate their knowledge in a way that others are able to further discuss. Often, experts have difficulty in explaining concepts to beginners due to language and advanced conceptual thought processes (Hinds and Pfeffer 2003). Time constraints need to be overcome through facilitation by the manager and an understanding by the member that he or she will function better because of participation in a CoP.

Case study

So far I have discussed the theoretical and conceptual framework for CoPs through a perspective that is based on private sector experiences. In order to place these concepts in the context of higher education, I use a case study based on my personal experience. The structure of this section is based on the three concepts of community failure listed above.

InterCoP- The organization framework

International Community of Practice, or InterCoP as it is referred to, was started as a result of an initiative by the board

of directors of Inholland University following a study on employee satisfaction, which revealed problems in this area. The board of directors (which I will further refer to as the CvB) decided to put out a request for proposals (RFP) to which all employees were encouraged to respond to. The RFP was clear in that management would play only a small role.

The InterCoP proposal was accepted with the recommended budget also being granted in full. This leads me to conclude that the organization is trying to initiate bottom-up communication, which is an important structural and cultural change for communication within Inholland. The hierarchical organizational structure of Inholland is typical of most educational institutions here in the Netherlands (Emst 1999). In this sense, InterCoP has support from management without over-involvement. Furthermore, it seems that upper-management recognizes CoPs as viable tools for change management, as this project was one of the first to be approved.

InterCoP - Community building

In order to discover possible themes for the first meeting, faculty in international programs were emailed a questionnaire. Of the 34 emails sent, 30 were replied to. Of these, nearly every response was positive in the sense that respondents thought it "was a great idea" and "a possibility to meet others and exchange experiences." About one half of those emailed answered the questionnaire and 20 were planning on coming to the first meeting.

The first meeting was held one afternoon in the early summer. There were 18 attendees from four different locations. Some participants were familiar with each other, but most had never met. For the first half hour we socialized informally, which started the process of community building.

The meeting started with an introduction to the concept of CoPs. Then there was an exercise based on de Bono's Six Thinking Hats method for lateral thinking, in order to discover a common domain (De Bono 1999). What we found was that this intervention achieved several goals of the framework for success. Firstly, we built social capital by starting the community in an open environment around a domain formulated by the participants themselves. In this sense, we sparked interest for working together as a group.

One of the problems experienced at this level is that coordination of activities, such as planning events and sending out newsletters, etc. is time consuming, yet crucial.

Individual cognitive and motivational considerations

The intervention served to help participants focus their thoughts on personal experiences they could then contextualize and explain to others. On the surface, the intervention worked to establish a common domain. At a deeper, cognitive level, members practiced explicating their ideas in a way that others could understand them, thus facilitating knowledge sharing. The next step of the exercise was to engage in dialogue with the whole group with the point of establishing the domain as well as to learn. When polled later if they believed InterCoP was a worthwhile investment of their time and effort, the majority of participants responded positively. This leads me to believe that motivational barriers to success are being minimized for participants due to the implicit rewards associated with a successful CoP; a sense of community where members relate to each other around their practice within a specific domain, which leads to learning and improvement of the professionals themselves.

Conclusion

In conclusion, I think that if we use the InterCoP as an example

we can conclude that there is in fact a place for communities of practice in higher professional education. It is my opinion that there is no one singular factor that determines the success or failure of a CoP, but rather a combination, which I have discussed above. Educational organizations are changing for better or for worse, and faculty is changing too. The traditional role of a lecturer is no longer possible, and those who do not change with the organization can quickly lose their sense of identity, purpose and role in the organization. In this paper, using the InterCoP as an anecdotal case study, I think I have shown theoretically as well as practically that one way to deal with the changes occurring in higher education is through the use of communities of practice. However, a CoP can not be seen as a cure-all and require considerable effort and resources from the participants, the facilitators and the organization. But, if it is successful, faculty can have a renewed sense of identity and meaning while exercising the practice of teaching in a professional organization.

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