Networked Learning Communities: A Perspective Arising From a Multidisciplinary Community of Practice on Student Eportfolios

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This article looks at the impact of a multidisciplinary community of practice (CoP) at the Hong Kong Baptist University aimed at encouraging the university-wide use of student eportfolios as part of course assessment. Twelve colleagues from different disciplines formed the CoP to initiate a culture of networked teaching and learning. Based on this experience, they proposed a model of “Networked Learning Communities” (NLC) that seeks to illustrate the buffering role of CoPs between the top-down and bottom-up approaches to the enhancement of teaching and learning in the University. The article also illustrates how two or more CoPs can enter into a “symbiotic” relationship through the exchange of knowledge and resources, which manifests the second stage of the NLC model.

Communities of Practice as a Model for Intra-Institutional Cooperation

The concept of community of practice (CoP) derives from the model of “Situated Learning” by Lave and Wenger (1991), which claims that the socially and culturally structured world engages in learning,
thinking, and knowing among people who are involved in a particular activity. According to Wenger (2007), “Communities of Practice are formed by people who engage in a process of collective learning in a shared domain and who interact regularly” (p. 1). Wenger (2007) has summarized 3 crucial dimensions (characteristics) of a CoP as follows (Wenger, 2007):

The Domain: A CoP has an identity defined by a shared domain of interest. The membership has a commitment to the domain, and therefore a shared competence that distinguishes members from other people. Members value their collective competence and learn from each other. The Community: Members build relationships that enable them to learn from and interact with each other in joint activities and discussions. The Practice: Members of a CoP are practitioners. They develop a shared repertoire of resources: experiences, stories, tools, and ways of addressing problems, i.e., a shared practice. (pp. 2-3)

Wenger (1998a) further conceptualized the interaction and application of the three CoP dimensions in Figure 1 (adapted from the original in Dutch). The three dimensions create the learning space by organizing different learning activities and by involving new people intrinsically. The value of CoP methodology lies in the linkages of initiating, conducting, and transforming with the domain, community, and practice. The facilitation aims at the creation of space for the exchange of knowledge and experience, and, hence, members are tempted to learn (Wenger, 1998a).

Wenger (2004) further associated CoP as the cornerstone of knowledge management in which “the Domain provides a common focus, the Community builds a relationship that enables collective learning, and the Practice anchors the learning in what people do” (p. 3). Figure 2 manifests the connection and logic of the relationship of a CoP, its Strategy and Performance. Figure 2 indicates that the development of a CoP can be simultaneously a bottom-up process and a top-down one. A CoP can create value by improving the performance of members when they apply their knowledge in the performance of their jobs, i.e., “they are the direct carriers of knowledge” (Wenger, 2004, p. 5). If a new solution is proposed in their CoP, they can apply it to their work as “strategy,” which would transform into “performance.” It is also fundamental to involve practitioners in knowledge management so that they return knowledge from the field and feed it back into the organization and, hence, complete the “learning loop” within the knowledge management cycle. Engaging in the dual process of producing and harvesting knowledge gives practitioners a unique
perspective on the strategic value of knowledge. CoPs whose “original purpose was to implement a knowledge strategy are now using their new knowledge to develop innovative strategies” (Wenger, 2004, p. 6). Besides, a CoP always combines bottom-up enthusiasm and initiatives from members with top-down encouragement from the organization. The doughnut model of knowledge management provides a strategic base that creates a driving locus of knowledge carrying throughout the whole organization (Wenger, 2004).

The uniqueness of a CoP can be better understood by comparing it with other forms of organization. Figure 3 demonstrates the summary and comparison of different forms of organizations that normally exist in other communities.

Communities of Practice, formal work groups, teams, and informal networks are useful in complementary ways. Figure 3 presents a summary of their characteristics.

The distinctive difference between CoPs and other formal organizations is that a CoP is people-oriented, in contrast to task-oriented or target-oriented organizations. We borrow the word “self-perpetuating” from Wenger and Snyder (2004, p. 132), which highlights sustainability and surrenders myopic, task-oriented, or target-oriented approaches in order to pursue a holistic and comprehensive development of the organization. The uniqueness of a CoP lies in its informality, which allows members to “organize themselves, set their own agendas, and establish their own leadership” (Wenger & Snyder, 2004, p. 127), with members themselves generating, reinforcing, and renewing knowledge. Members are animated by the structure, atmosphere, and relationship within the CoP, and their passion, commitment and identification become contagious. This prolongs and preserves knowledge and its management within the community. To a certain extent, members position themselves in a “practice-focused discourse” (Niesz, 2007, p. 610) and usher in new cultural practices with new orientations. These permeate the organization and, hence, institute a new learning and management culture within the establishment of the community. But the change is neither immediate nor short-term. Cox (2002) suggests that at least 5 years may be required for an institution to show a cultural change as a result of the CoP (FLC) approach.

**REFLECT:**

**A CoP to Develop Student Eportfolios for Assessment and Life-Long Learning**

Keeping in view HKBU’s emphasis on Whole Person Education and
its direct correlation to the 7 Graduate Attributes (GAs) as defined in the HBKU Vision 2020 statement, a pilot to introduce a student eportfolio system into selected courses was launched by HKBU’s Centre for Holistic Teaching & Learning in 2013-14. This was an implementation project to initiate eportfolios at HKBU. It resulted in a group of enthusiastic people starting the Reflective Electronic Portfolios: Landscape for Engaging a Community of Practice Through Technology (CoP-REFLECT). Two of the courses participating in this pilot were the foreign language courses of the European Studies Programme, namely, the courses European Language II (German) and European Language II (French). In both of these courses, eportfolios were introduced in order to assess and support the autonomous learning processes of a set of approximately 60 foreign language students (Chaudhuri, 2015). Students were asked to collect artefacts in three different categories, namely, My Learning Experiences, Journal, and Creativity, each corresponding to the HKBU Graduate Attributes of Knowledge, Critical Thinking, and Creativity respectively (Wong et al., 2016). The pilot used the hugely popular Mahara eportfolio platform and offered technical and pedagogical support to students and teachers in the implementation and the use of eportfolios. Feedback to the portfolio process was collected through the use of a survey questionnaire (see Appendix A, Part I). Despite some negative feedback regarding the technology used and the time required to maintain a portfolio, the initial data collected from the students was encouraging in terms of the usefulness of a portfolio itself. For the analysis, statements 2, 3, 6, 9, and 11 of the questionnaire were identified as being the most relevant to the outcomes identified for the portfolios in those courses. The results within European Language II (German) were analyzed for these particular prompts, and it was found that all of the statements returned a high degree of agreement (see Figure 4). Although the sample was relatively small ($n = 14$), the results were encouraging enough to convince the teachers of these courses to further pursue the idea of using eportfolios in their courses.

These results eventually led to the idea that the experiences of the participating courses in the pilot study could be collated to come up with transdisciplinary guidelines and assessment rubrics for the university-wide implementation of eportfolios beyond the period of the pilot study. Therefore, led by the European Studies Programme of the Department of Government & International Studies, a CoP was set up in May 2014 to exchange ideas on how student eportfolios could become a tool for assessment and for lifelong learning. It would also provide evidence of student achievement of the HKBU GAs. The CoP was named REFLECT: Reflective Electronic PortFolios: Landscape for Engaging a CoP Through Technology. It was set up initially with a 12-month tenure and included
12 like-minded colleagues from multiple disciplines and learning centers at the University. They were united by either their experience working with eportfolios as assessment tools or their desire to introduce new forms of assessment. The assessment would reflect learning in their respective courses in a more qualitative fashion. Disciplines represented in the CoP were History, Mathematics, Business Communication, Physical Education, European Studies, and Education Studies, and members included Professors, Assistant & Associate Professors, Lecturers, Learning Officers, Librarians, and General Education officers. One principal coordinator and three coordinators were involved in the core planning, organizing, and design of the CoP. The project officer managed the project in terms of budget and administrative coordination and served as liaison as well as providing research assistance and generation of evaluation reports. Members joined the CoP voluntarily, and the meetings were scheduled once every 2 weeks as per the convenience of the members. The overall average attendance at the meetings involved over 80% of the membership. Along with the CoP, a “Virtual CoP (VCoP)” (Dubé, Bourhis, & Jacob, 2005, p. 146) was established by creating a sharing and exchange platform on Facebook (Closed Group: REFLECT: A Community of Practice on Student Eportfolios), a webpage on Weebly (http://copreflect.weebly.com/), and a common database on Dropbox to share files, documents, and useful materials. VCoP was set up to increase the connectedness of the members, strengthen the scholarly and information exchange, enhance collaboration, and attract colleagues to learn more about student eportfolios. As of now, the VCoP serves as a subgroup of the CoP but is also tasked to attract new members.

With reference to Wenger’s (1998b) stages of development of a CoP (see Figure 5), five stages of the progress of the project were initially proposed: Creation, Development, Operational, Growth, and Sustainability.

Creation and Development Stage (Potential + Coalescing)

The principal coordinator initiated the setup of the CoP and has the leadership role within the CoP both in terms of selecting members and setting the course of development of the CoP. The coordinators were selected because of their experience in implementing eportfolios at the course level. Their role was to mentor other members of the CoP and take the lead in spreading the idea of the eportfolio in the developmental stages of the CoP. The coordinators also acted as a subgroup of the CoP that collated and developed the various ideas and issues discussed in the CoP meetings. The principal coordinator gathered colleagues who were interested in implementing student eportfolios as assessment tools for
their courses. After identifying the strengths and interests of the members, the roles, functions, outcomes, and guidelines of the CoP were negotiated by the members in the meetings and on the virtual platforms. Simultaneously, they started to learn more about technical aspects of eportfolios. Guidelines were developed to create student eportfolios, and the integration of the GAs into students’ eportfolios and components or artifacts were further discussed and identified.

**Operational Stage (Active)**

In the operational stage, members piloted eportfolios in their own chosen courses and engaged closely with the community to share their experiences. Members decided why they would like to introduce eportfolios, how they would design the assignments for them, and which electronic platform they would prefer. In this way, the operational phase also provided a learning curve for the members of the CoP. By collecting and collating these individual experiences of using eportfolios as assessment in courses from different disciplines, the CoP was able to use the inductive method to come up with guidelines and rubrics for university-wide implementation of eportfolios. The guidelines included the rationale for using student eportfolios as well as the pros and cons of different electronic platforms that can be used to host them. Finally, members evaluated the effectiveness of student eportfolios for respective “Course Intended Learning Outcomes” using a specially drafted survey questionnaire distributed to the students and then reported back to the CoP (see Appendix A).

**Growth and Sustainability (Dispersed + Memorable)**

Throughout the initial 12-month tenure of the CoP, members were encouraged to share their experiences with colleagues outside of the CoP both formally and informally. The university’s professional development program was used as one of the public fora for this purpose. Scholars and experts on student eportfolios were invited to give presentations and practical workshops to the members.

**Re-Theorizing and Extension:**

“Networked Learning Communities” (NLC)

A model of “Networked Learning Communities” (NLC) was proposed based on the experiences of the CoP REFLECT, especially the third stage. There, the CoP worked together with administrative bodies
and centres for teaching and learning to disseminate its strategies on the integration of student eportfolios into the University. The model engages existing CoP models to demonstrate evolution and development of the CoPs’ role as liaison within the diverse stakeholders of an organization. This proposed NLC model, which is more specific to educational institutions, was mainly adapted from the Faculty Learning Community (FLC) model for higher education of Cox (2004), the Learning Space Model for education from Wenger (1998a), and the CoP Model for organizational performance for business from Lesser and Storck (2001).

The framework and concept of NLC stems from the FLC model, which is “a cross-disciplinary faculty and staff group who engage in an active, collaborative, year-long program with a curriculum about enhancing teaching and learning and with frequent seminars and activities that provide learning, development, the scholarship of teaching, and community building” (Cox, 2004, p. 8) (see Appendix B). According to Cox (2004), “Multidisciplinarity and community are the elements that allow FLCs to excel in teaching and learning pursuits” (p. 9). In addition, Wenger’s (1998) aforementioned Learning Space Model places emphasis on the combination of Community, Domain, and Practice in a CoP. The model reveals the practice (exploration and implementation of student eportfolios) in the domain (the prospect of using student eportfolios as assessment and adding value to the GAs) in the presence of community (the CoP REFLECT). The Lesser and Storck (2001) model broadens the educational perspective by adding organizational performance as one of the positive influences of CoPs. They argue that communities within organizations play an important part in performance because of their potential to overcome the inherent problems of a slow-moving traditional hierarchy and to be a “means of developing and maintaining long-term organization memory” (p. 832).

Figure 6 indicates how a CoP creates social capital such as connections, relationships and common contexts, which can lead to better organizational performance.

According to Lesser and Storck (2001), a CoP provides a structure or medium in which to increase the ability of members to connect with others within the organization. Hence, members can develop interpersonal relationships, rather than just being “isolated colleagues.” Equally, a CoP enables members to gain access to people and information in the given shared context. These are the values that a CoP creates in terms of social capital.

Within institutions of higher education, especially, there is a perceived distance between the community of administrators (CoAs) and the community of learners (CoLs). CoAs are defined here as the group in managerial and administrative positions, including numbers of
university employees responsible for the maintenance and supervision of the institution. The CoLs are the students. While the CoA formulate and frame the visions and strategies of the institution, situate the directions of teaching and learning, and implement the policies of the institution, CoLs are definitely the key stakeholders. But connection, consultation, and interaction between administrators and students are often few and usually top-down, taking the forms of online questionnaires or focus group interviews. It is not usual practice for students to communicate their opinions directly or express their attitudes to the administrative level of the institution. Thus, in these institutional settings, it is up to CoPs to take up the role of bridging this gap.

Figure 7 illustrates that in NLC the CoP of faculty and staff acts as the buffer between the CoAs and the CoLs. Their practice within the common context and shared knowledge subsequently extends to the student level, and students, in turn, transform that knowledge into performance (Wenger, 2004) by synthesizing knowledge, skill, and attitude into their learning. This performance feeds back into the work or practice of CoP members in terms of student feedback and reflection as well as their own reflection as practitioners and transforms it into knowledge for the CoAs, collected through reports, focus group interviews, and questionnaires. This knowledge is also collected through professional development programmes initiated by the CoAs, but with speakers drawn from the CoP. Thus, instead of a scenario where a CoA initiates a mandatory policy that for all teaching and academic staff as well as for students, the NLC enables a scenario where the impetus comes from the CoA but the initiative comes from the CoP. Thus, it is a bottom-up approach to various strategy questions within the institution (Wenger, 2004). In the long term, the CoP’s capitals, such as connections, relationships, common context (Lesser & Storck, 2001), knowledge, and reflective culture accumulate and become organizational memory. In short, the CoP acts as an informal think-tank that links up, maintains, and provides feedback to the various stakeholder communities including students (CoLs) and administrators (CoAs).

CoP-REFLECT as Evidence of the NLC Model

The work of CoP-REFLECT can be used to illustrate the functioning of NLCs at the practice level. On the broad macro level, the members created knowledge for themselves about the types and affordances of eportfolios (the creation and development stages). In
the operational phase, the members engaged their students to transform this knowledge into practice and collected feedback that was used in the CoP to compare and contrast the knowledge created about the eportfolio in the earlier stages. In the final stage, CoP-REFLECT proposed a generic model of student eportfolios with guidelines and an assessment rubric that was ultimately based on the institution’s own students’ and teachers’ reflective feedback. This “reflected” eportfolio model and system, in turn, influenced the administrative policy-making and strategic planning for implementing outcomes assessment.

Apart from this broad and “given” role of CoP-REFLECT, two other examples illustrate that NLC completes the reflective system within the institution, and that the institution benefits from more than one type of feedback that can emerge from CoP connectivity. The first example involves the feedback on platforms for hosting eportfolios. The initial discussion on the e-platforms within the CoP assumed that using the built-in platform, “My Portfolios,” of HKBU’s LMS Blackboard would be the simplest solution for uninitiated teachers and students alike. The subsequent negative feedback to “My Portfolios” is evidenced by the following student comments: “The system Blackboard is not convenient for constantly (constructing) a comprehensive eportfolio”; “Blackboard eportfolio looks very ugly”; “There were technical problems (could not upload the videos) when using Blackboard and it was not user-friendly.”

These comments encouraged CoP members to try out different platforms, and the feedback was incorporated into the working report of the CoP. It was hoped that this would not only facilitate the discussion of the utilization of eportfolios in the University, but also reflect on the real necessities and demands of e-learning by providing evidence and data on the e-learning skills and knowledge available to instructors and students in the University. A direct consequence of this exchange was that the Center for Holistic Teaching and Learning unit (CoA) reported members’ and students’ issues to Blackboard, and user group workshops were organized by the university’s Blackboard consultant to address these issues. Technical and administrative problems were also solved at the CoA level.

The second example relates to the promotion of the HKBU GAs. At HKBU, Whole Person Education is emphasized as a distinctive education strategy. This is operationalized into GAs, which should be attained by the time students graduate from HKBU. The evidence collection on the alignment of the GAs, courses, and assessment, however, depends mainly on course-embedded assessments, which are largely quantitative in nature. Though the CoP-REFLECT did not
initially set out to use the GAs as one of the assessment criteria for the
generic model of a student eportfolio, they quickly became one of the
cornerstones of the proposed model along with the assessment
rubric. Once consensus was achieved that student eportfolios could
ensure the compatibility of assessment tools and approaches in the
assessment of learning outcomes at the programme and course level,
it was evident that they would also provide the best possible
evidence of student achievement of the HKBU GAs.

**NLC Stage 2: Symbiosis**

A further example of inter-community networks is when two or
more CoPs enter into a “symbiotic” relationship through the
exchange of knowledge and resources (see Figure 8). This is the
second stage of the NLC model.

Within the symbiosis climate nurtured by two CoPs with similar
interests, the exchange of knowledge, resources and experiences
courages a bilateral or multilateral collaboration and development
of CoPs. “Symbiosis” of NLCs is a mutualistic approach rather than a
competitive one, because an individual CoP can welcome
advantages, efforts, and assistance from other CoP(s). This can lead to
a long-term interaction, collaboration, and production.

In our CoP-REFLECT example, some coordinators and members
were also members of the CoP “Development of a Teaching Portfolio
Framework Through a Multidisciplinary Community of Practice,” just as
members of the above CoP were part of CoP-REFLECT, in order to
integrate and extend the utilization of student eportfolios and teacher
eportfolios. The synergies in terms of knowledge building and strategy
management were enormous. Lesser and Storck (2001) describe a CoP as
a vehicle to influence organizational performance by developing and
maintaining the social capital among members in “structural, relational
and cognitive dimensions” (Lesser & Storck, 2001, pp. 834-836). Taking
the symbiotic situation of NLC into account, two additional items of
social capital, cultural and managerial capital, can be added to the
original proposed dimensions (see Figure 9).

**Evidence**

The evidence involved in this project was drawn from a small sample
of 7 CoP members who have used student eportfolios as an assessment
tool and 50 students who have used student eportfolios to present their
work. Two types of evidence were collected during the working of the
CoP: one from students about their experience using eportfolios as part of a course requirement and the other from CoP members via an open-ended questionnaire distributed after one-year of participation in the CoP (see Appendix C). The insights from both are summarized below, beginning with CoP members’ feedback.

Members reflected that they obtained professional benefits from collaboration and support from their peers. They benefited further from shared expertise, personal experiences, practices, insights, and pedagogies. They also benefited from self-reflection on teaching and from the new techniques, approaches, skills, and knowledge that were introduced during the meetings, workshops and sharing sessions. At the time of joining the CoP, some of them had open minds, and they understood that they had to work with a group of colleagues, whereas others preferred to be passive observers and admitted that they were quite reluctant at the beginning. After participating in the CoP, they found that the organization was meaningful, and the exchanges and brainstorming of ideas put their individual teaching practice into a bigger perspective. They recognized that this kind of organization should be the driving force for change in the university. When they were asked about how their ideas on teaching and learning were influenced, they acknowledged that the CoP could act as a springboard to explore new ideas beyond mere instruction. More specifically, one member became convinced of the absolute necessity of using portfolios in teaching and learning in his or her particular discipline. Most of the teachers, via the implementation of student eportfolios, perceived that students need ownership, freedom, and space for creativity in their learning process. When members were asked about the CoP’s influences on policy making on teaching and learning in the University, they commented that the CoP could provide space for teachers to reflect so that there were shifts from a teacher-oriented philosophy to a student-centered one, and from an information-oriented teaching and learning philosophy to a focus on the importance of acquiring skills and competences. The CoP also helped to identify the necessary support needed for front-line teachers and provided evidence of the effectiveness of a particular teaching and learning approach. This would, in turn, make it easier to indicate to the policy makers which areas or issues should be addressed at the institutional level in order to be able to promote innovative practice in teaching and learning.

The feedback from students was collected by CoP members from their classes by means of a survey (see Appendix A). A rigorous data analysis by the members is still underway, but the initial feedback as reported by the members in CoP meetings has been positive. For instance, students could play with the features of the template, students’
works fit the expectations of the lecturer, students got over the problem and demonstrated creativity, and so forth. Most of the students reported that they were satisfied with having eportfolios as their assessment tool. However, nearly all students faced technical problems, such as difficulties when sharing the eportfolios and uploading the videos.

Some Hong Kong students did not agree that an eportfolio could help them demonstrate creativity, as they just copied and pasted most of the content for the eportfolio, but most of the exchange students claimed that the eportfolio was useful, and they enjoyed the space allowed for showing their creativity, reflections, and analysis. Considering the reflection elements in the eportfolio, some (around 33% of the responding students) of the students agreed that they went deeper in their learning when they were using eportfolios, but most of the students were not yet truly reflecting (only finishing the tasks or just copying-and-pasting). Although a deeper analysis of the data cannot be presented within the scope of this article, because the data belong to the individual members and their students and the article itself deals with CoPs rather than eportfolios, the above statements from teachers and their students do reflect a high amount of engagement with the eportfolio instrument led by the CoP, which was its primary goal.

One COP-REFLECT member further describes how he or she put mobile devices to work in the classroom to directly transfer skills from the classroom to the portfolio. His or her findings indicate that students’ learning curves were accelerated, which enabled them to find and analyze ideas, use higher-level cognitive skills, evaluate, generate content, and assess their own findings.

The evidence points towards the many positive impacts of having a CoP in which to share, collaborate, and, most importantly, support and scaffold the introduction of new, innovative, and reflective modes of teaching and learning. Nevertheless, there is reluctance within the university community to engage or take the initiative to establish such CoPs. Most of the members would not like to take on the role of a principal coordinator. This is an important insight that exposes the inherent bias in research-oriented activities being given more priority than teaching and learning at the University.

**Conclusion**

In this article, a model of “Networked Learning Communities” (NLC) was proposed based on the development of a CoP. This shows how a CoP can influence and bring about change, not only within its members, but also within the larger university community. NLC performs a bridging role to connect CoAs and CoLs. The practice of the CoP
members, for instance, with the initiatives to collect feedback and reflection from students as well as their own reflection as practitioners, creates the bottom-up motivation needed to enhance learning innovation at the CoL level. The next steps of CoP-REFLECT will be dissemination in order to increase the network of colleagues interested in the domain of eportfolios for learning practice. The work done by the CoP in creating eportfolio guidelines, rubrics, and assessments will be made available to new practitioners and, thus, broaden the eportfolio implementation at HKBU.

References


content/uploads/2013/03/Wenger_Coenders_artikel-uit-Canon-vh-Leren.pdf


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Figure 1
Learning Space According to the CoP Methodology
With the Three Dimensions (Wenger, 1998a, p. 134)

Figure 2
The Doughnut Model of Knowledge Management
(E. Wenger, personal communication, November 18, 2015)
<table>
<thead>
<tr>
<th><strong>Community of Practice</strong></th>
<th><strong>Purpose</strong></th>
<th><strong>Who Belongs?</strong></th>
<th><strong>What Holds It Together?</strong></th>
<th><strong>How Long Does It Last?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop members’ capabilities, to build and exchange knowledge</td>
<td>Members who select themselves</td>
<td>Passion, commitment, and identification with the group’s expertise</td>
<td>As long as there is interest in maintaining the group</td>
<td></td>
</tr>
<tr>
<td><strong>Formal Work Group</strong></td>
<td>To deliver a product or service</td>
<td>Everyone who reports to the group’s manager</td>
<td>Job requirements and common goals</td>
<td>Until the next reorganization</td>
</tr>
<tr>
<td><strong>Project Team</strong></td>
<td>To accomplish a specified task</td>
<td>Employees assigned by senior management</td>
<td>The project’s milestones and goals</td>
<td>Until the project has been completed</td>
</tr>
<tr>
<td><strong>Informal Network</strong></td>
<td>To collect and pass on business information</td>
<td>Friends and business acquaintances</td>
<td>Mutual needs</td>
<td>As long as people have a reason to connect</td>
</tr>
</tbody>
</table>
Figure 4
Analysis of Responses to the Feedback Questionnaire
(Chaudhuri, 2015, p. 113)

![Graph showing feedback to the E-Portfolios Experience]

- **Strongly agree**
- **Agree**
- **Neutral**
- **Disagree**
- **Strongly disagree**

Figure 5
Stages of Development of a CoP (Wenger, 1998b, p. 3)

- **Potential**
  - People face similar situations without the benefit of a shared practice
  - Typical Activities: Finding each other, discovering commonalities

- **Coalescing**
  - Members come together and recognize their potential
  - Typical Activities: Exploring connectedness, defining joint enterprise, negotiating community

- **Active**
  - Members engage in developing a practice
  - Typical Activities: Engaging in joint activities, creating artifacts, adapting to changing circumstances, renewing interest, commitment, and relationships

- **Dispersed**
  - Members no longer engage very intensely, but the community is still alive as a force and a center of knowledge
  - Typical Activities: Staying in touch, communicating, holding reunions, calling for advice

- **Memorable**
  - The community is no longer central, but people still remember it as a significant part of their identities
  - Typical Activities: Telling stories, preserving artifacts, collecting memorabilia

**Stages of Development**

(time)
Figure 6
CoPs Are Linked to Organizational Performance Through the Dimensions of Social Capital (Lesser & Storck, 2001, p. 833)
Figure 7
“Networked Learning Communities” (NLC) via the Development of CoPs (1st Stage)

Community of Admins (CoA)

Community of Practice (CoP)

Community of Learners

CoP Capitals:
Connections,
Relationships,
Common Context,
Knowledge, Reflective
Culture...
→ Organizational
Memory

Figure 8
“Symbiosis” of NLC (2nd Stage)

CoP I

CoP II

Accumulated CoP Capital:
Knowledge, resources, experiences...
Social Capital (Lesser & Storck, 2001)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Illustration in CoP in the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td>Making connections to others within the organization</td>
</tr>
<tr>
<td>Relational</td>
<td>Reinforcing the development of interpersonal relationships within the organization</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Developing the shared context between two parties</td>
</tr>
</tbody>
</table>

NLC Capital

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Illustration in CoP in the institution</th>
<th>First Stage of NLC</th>
<th>Second Stage of NLC (&quot;Symbiosis&quot; of NLCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural</td>
<td>Prompting cultural and atmospheric change (in terms of learning, teaching and administrating) in the institution</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>Managerial</td>
<td>Completing the circuit of CoA and CoL, lead to a more transparent and reflective management mechanism within the institution</td>
<td>Medium</td>
<td>Strong</td>
</tr>
</tbody>
</table>
### Appendix A

**Student Survey on Using Eportfolios**

*Part I: Using the scale provided, please rate the extent to which you agree or disagree with the following statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall, I found constructing the eportfolio valuable to this course.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I acquired useful skills in creating my eportfolio.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. The process of creating my eportfolio helped me to take responsibility for my own learning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Showcasing electronic media (i.e. text-based, graphic, or multi-media elements) in my eportfolio allowed me to demonstrate a more meaningful understanding of my course.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Overall, I valued the integration of the eportfolio into this course.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Overall, I am satisfied with the way my learning is assessed using the eportfolio in this course.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I was able to engage with the eportfolio interface in a worthwhile manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I could exercise choice in how I customized my eportfolio entries.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Constructing the eportfolio helped me to reflect upon my achievement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I have a generally favorable attitude toward using the eportfolio.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Using the eportfolio enhanced my effectiveness in learning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Other comments on eportfolio?**
# Part II: (Please check the box where you think is appropriate)

1. Have you used or created an eportfolio before taking this class?
   - Never □
   - Once □
   - Two to three times □
   - More than three times □

2. During this course, how often have you reviewed, interacted with, or added to the course eportfolio?
   - Not at all □
   - About once each month □
   - A few times a month □
   - About once each week □
   - A few times a week □
   - Five to six times a week □
   - About once a day □
   - Several times a day □
   - Other □

3. What is your self-assessment about using eportfolio?
   - Low experience □
   - Moderate experience □
   - High experience □

4. After working with the eportfolio in this class, how experienced would you judge yourself to be?
   - Low-level experienced □
   - Moderately experienced □
   - Highly experienced □

5. With regard to technology in general, how would you describe yourself?
   - Novice User □
   - Intermediate User □
   - Advanced User □

6. Gender
   - Male □
   - Female □

7. Your year in school
   - 1st year □
   - 2nd year □
   - 3rd year □
   - 4th year □
Appendix B
The Long-Term Goals of an FLC Program

2. Increase faculty interest in undergraduate teaching and learning.
3. Investigate and incorporate ways that diversity can enhance teaching and learning.
5. Broaden the evaluation of teaching and the assessment of learning.
6. Increase faculty collaboration across disciplines.
7. Encourage reflection about general education and the coherence of learning across disciplines.
8. Increase the rewards for and prestige of excellent teaching.
9. Increase financial support for teaching and learning initiatives.
10. Create an awareness of the complexity of teaching and learning.


Appendix C
The Open-Ended Questionnaire Distributed to the Cop Members
After One Year of Participation in the CoP

1. Based on your experience, please list a minimum of three professional benefits of participating in a CoP (random order).

2. What were your expectations when you joined the CoP? Were these expectations met or did they change along the way? Please explain.

3. How did participation in the CoP influence your ideas on teaching & learning?

4. In your opinion how can (any) CoP influence policy making on teaching and learning in the University?