COMMUNITIES OF PRACTICE AT MCMASTER UNIVERSITY

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WHAT ARE COMMUNITIES OF PRACTICE?

"Communities of practice" (CoPs), sometimes called "learning networks", are "groups of people who share a concern, a set of problems, a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott & Snyder, 2002, p. 4). The term was coined by Lave and Wegner in 1991 to describe a model of learning based on apprenticeship whereby new members learn by a process of acculturation which "occurs through involvement in community practices and increasing roles and responsibilities within the community" (Chapman, 2008, p. 41).

Communities of practice may exist in a number of different settings, including educational institutions and corporations. Regardless of their context however, Wenger et al. (2002), identify the following "knowledge structure" that distinguishes CoPs from other groups with a common interest or learning objective:

A community of practice has an identity defined by *a shared domain of interest*. The domain is a "common ground" which provides a common sense of identity and purpose. "[It] inspires members to contribute and participate, guides their learning, and gives meaning to their actions. Knowing the boundaries and the leading edge of the domain enables members to decide exactly what is worth sharing, how to present their ideas, and which activities to pursue" (p. 28). The domain evolves with the broader context in which the community is situated and with the composition of the membership.

The *community* creates a social learning environment. "A strong community fosters interactions and relationships based on mutual respect and trust. It encourages a willingness to share ideas, expose one's ignorance, ask difficult questions and listen carefully" (p. 28).

The *practice* is a shared body of knowledge and repertoire of resources: experiences, stories, tools, ways of addressing recurring problems, best practices.

In fact, different motivations for joining a community of practice are represented in the three dimensions of *domain*, *community* and *practice*.

Some typical examples of the activities of a community of practice include:

- Problem solving;

- Reusing, recycling and sharing assets and resources such as syllabi, learning objects, course outlines, teaching materials, etc.;
- Coordination of events, meetings;
- Discussing developments, ideas, best practices;
- Documenting tacit and explicit knowledge;
- Visits to each other's classes, to other universities, etc.; and
- Mapping knowledge and identifying gaps. (Wenger, 2006)

Strategic Intents for Communities of Practice

According to Wenger, McDermott & Snyder (2002), communities of practice may have one of four "strategic intents". These are:

1. *Helping communities*, intended to facilitate peer-to-peer networking;
2. *Best practice communities* that serve to develop, share and document methods and techniques that have proven to be successful;
3. *Knowledge stewarding communities* whose focus is to organize, improve and distribute the collective knowledge of the members; and
4. *Innovation communities* which serve to foster unexpected ideas or collaborations. (pp. 76-77)

These intents require different structures. For example, "helping" communities require fora for sharing ideas, whereas "knowledge stewarding" communities require structure and roles for verifying the knowledge the community manages (p. 74). As the community evolves and matures, it can expand its focus to include other areas.

WHY ESTABLISH COMMUNITIES OF PRACTICE AT MCMASTER?

Wenger (2006) identifies the following short and long-term benefits of CoPs for both the organization and its members.

TABLE 1: REASONS TO FOCUS ON COMMUNITIES OF PRACTICE (WENGER, 2006)

Why focus on communities of practice?		
	Short-term value	**Long-term value**
Members	• Help with challenges • Access to expertise • Confidence • Fun with colleagues • Meaningful work	• Personal development • Reputation • Professional identity • Network • Marketability
Organization	• Problem solving • Time saving • Knowledge sharing • Synergies across units • Reuse of resources	• Strategic capabilities • Keeping abreast • Innovation • Retention of talents • New strategies

According to Wenger, McDermott and Snyder (2002), the most successful communities of practice thrive when the strategic goals and needs of the parent organization intersect with the passion and interests of the community's members. The initiative to create communities of practice at McMaster is well aligned with the University's strategic directions, as witnessed by two key University documents, *Refining Directions*. *Inspiring Innovation and Discovery* (2003) and *Initial Observations and Recommendations* of the Task Force on Teaching and Learning (TOTAL) (2008).

One of the key objectives of *Refining Directions* (2003) is "to create an inclusive community with a shared purpose" (p. 6). Creating communities of practice around shared domains of interest that are of strategic importance to McMaster is one step toward achieving this goal. It is not surprising, then, that the creation of communities of practice is a specific recommendation of the Provost's Task Force on Teaching and Learning (TOTAL):

> [We need to] "reiterate our commitment to scholarly teaching and learning by...developing a 'Community of Practice' to research, share and communicate 'best practices' regarding teaching and learning across the University and beyond" and "recogniz[e] individual/team contributions to the 'Community of Practice' through the CP/M process" (pp. 21-22).

Communities of practice create a body of shared knowledge and promote best practices. Sharing best practices in teaching and learning, a *domain* common to the McMaster communities of practice, is one of the principles of the Scholarship of Teaching and Learning (SoTL). In the words of Lee S. Shulman, former president of the Carnegie Foundation for the Advancement of Teaching and well known scholar, "We develop a scholarship of teaching when our work as teachers becomes public, peer-reviewed, and critiqued, and exchanged with other members of our professional communities so they, in turn, can build on our work." (2000, pp. 158-159). Since "encouraging and supporting instructors to develop expertise in the scholarship of teaching and learning" (p. 22) is another key recommendation of the TOTAL Task Force (2008), this is yet another way to support the University's strategic objectives. The four communities of practice currently in existence at McMaster are: *Teaching with Technology, Pedagogy, First Year Instructors,* and *Teaching Professor*s.

CULTIVATING COMMUNITIES OF PRACTICE

Contrary to the idea that communities of practice are naturally occurring organizational phenomena that cannot be deliberately created, the possibility--and desirability—of proactively and intentionally establishing is a common theme in recent literature. This practice is alternatively described as "cultivating", "coaching" or "nurturing" communities (Wenger, McDermott, & Snyder, 2002; Hildreth & Kimble, 2008; Klein & Connell, 2008). As the campus teaching and learning support centre at McMaster whose mandate is to **"** to encourage, support and collaborate with the teaching community in the scholarly exploration, implementation, evaluation and dissemination of teaching and learning practices", it is incumbent upon the Centre for Leadership in Learning to cultivate and support the development of these communities.

Wenger, McDermott and Snyder (2002) offer "seven principles for cultivating communities of practice" (pp. 51-63). A brief overview of these principles is provided below.

1. *Design for evolution*

Communities usually build on existing personal relationships and networks. As the community grows and new members join however, the focus and interests of the community may change. New domain developments and issues will also influence the orientation of the community, just as the evolution of the community can also be precipitated by the *coordinator* (described below). The design of the community should not only allow for change then, but should also be a catalyst for evolution and growth. Active, healthy communities reflect on their existence and evolution.

2. *Open a dialogue between inside and outside perspectives*
   Good community design requires an insider's perspective and knowledge to understand the issues of the domain. At the same time, it solicits input from outsiders in order to get fresh ideas and perspectives about what the community could achieve.

3. *Invite different levels of participation*
   Since community members have different levels of interest in the community and different motivations for joining, good design allows for varying degrees of involvement. Vibrant communities have a *coordinator* who organizes events and provides opportunities for members to build connections. They also have a *core* group of active members (usually 10-15% of the community) who "take on community projects, identify topics for the community to address and move the community along its learning agenda" (p. 56). Outside this group is the *active* group (approximately 15-20% of the community), made up of members regularly attend meetings, but who lack the intensity of commitment or level of participation of the core. A large portion of community members are *peripheral* and rarely participate. Finally, outside these three levels are non-members who may have an interest in the community (e.g. the Centre for Leadership in Learning (CLL), the University administration, etc.). Members will move between these levels and the community needs to provide different opportunities to keep them engaged.

4. *Develop both public and private community spaces*
   Events, formal presentations and the resources made available through the community's virtual space represent the public "face" of the community, while the private spaces—the interpersonal relationships of the members—represent the heart. A common mistake of community design then, is to focus too heavily on public events. "The key to designing community spaces is to orchestrate activities in both public and private spaces that use the strength of individual relationships to enrich events and [then] use [these] events to strengthen individual relationships" (p. 59).

5. *Focus on value*
   Communities thrive because they create value for the members and the parent organization. Early on in the life cycle of the community, value mostly comes from focusing on the current problems and needs of community members. An important step in the development of the community is to create a shared knowledge repository accessible to all: the four McMaster communities have opted to create a shared virtual space in the campus learning management software.

   Potential value emerges from the events, activities and relationships of the community: "many of the most valuable activities of the community are the small, everyday interactions—informal discussions to solve a problem, or informal discussions…" (p. 60).

6. *Combine familiarity and excitement*
   The familiarity of regular events and meetings creates a comfortable, "safe" environment where members can speak candidly. The occasional introduction of novelty or diverging perspectives will generate enthusiasm and keep members engaged.

7. *Create a rhythm for the community*
   The rhythm of the community is the strongest indicator of its vibrancy. Too many meetings and activities will leave members feeling overwhelmed; too few will cause members to lose interest. It is important to note that the rhythm is likely to change as the community evolves.

PLANNING AND LAUNCHING COMMUNITIES OF PRACTICE

The five stages of development for communities of practice described by Wenger, McDermott and Snyder (2002, pp. 65-111) are:

1. Potential;
2. Coalescing;
3. Maturing;
4. Stewardship; and
5. Transformation.

At each of these stages, the community is faced with a central challenge that must be addressed before it can progress. While these stages are typical, it is important to note that communities may move through them at different rates, and some communities may never make it through all five. Stages and steps in the formation of communities of practice at McMaster have been summarized below. A tentative timeline can be found at the end of this document.

STAGE ONE: POTENTIAL

1. Determine the Primary Intent of the Community

The development of the community begins with an extant social network. As the community starts to coalesce around a more formalized structure, the key *domain* issue it faces is defining the scope in a way that motivates and excites members and aligns with institutional goals. The main *community* issue is to identify and bring together people who are already have a peer network around this domain and convince them of the additional networking and knowledge sharing benefits of a community. In terms of *practice*, identifying common knowledge needs is key (Wenger, McDermott & Snyder, pp. 70-71). Clarifying the primary intent of the community is an essential first step since different community intents require different structures and activities, as discussed above.

2. *Define the Domain and Identify Engaging Issues*

The following criteria have been identified as mechanisms for defining the domain:

- Focus on issues that are particularly important to the organization;
- Focus on aspects of the domain community members will be passionate about;
- Define a manageable scope, one that is wide enough to bring in new people and new ideas, but narrow enough that most members will be interested in the topics discussed (Wenger, McDermott and Snyder p. 75).

3. *Build a Case for Action*

Building a case for action clarifies the importance of the domain to the organization and to the members.

4. *Identify Coordinators*

Coordinators (referred to Chairs and Co-chairs at McMaster) are key to community success: their knowledge and reputation help legitimize the community and attract members. Current chairs can be found at cll.mcmaster.ca/cop.

5. *Connect Potential Members*

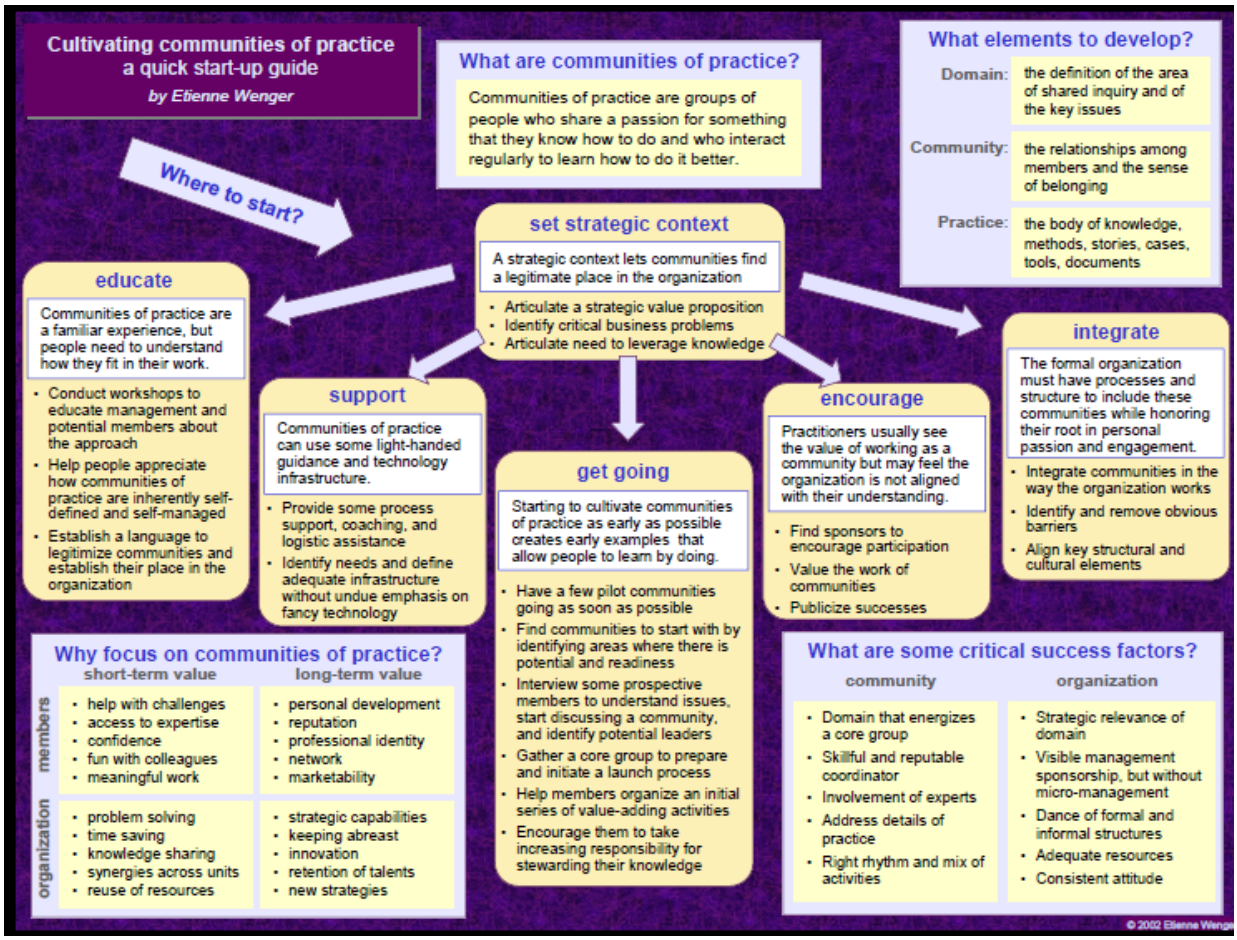
The initial meeting of the community serves several purposes: to make connections, to discover issues, to clarify the potential value of the community to its members and to the organization, to identify the primary domain of intent, the scope, and potential membership.

6. *Create a Preliminary Design for the Community*

A preliminary design might include a description of the community's scope, a list of potential topics to be explored, community knowledge-sharing processes and names of key members. These designs have been documented in the communities' shared online environment in McMaster's learning management system.

FIGURE 1: CULTIVATING COMMUNITIES OF PRACTICE: A QUICK START-UP GUIDE

(WENGER, 2006)



STAGE TWO: COALESCING

During this stage, the community is officially launched, and it hosts activities to allow members "to build relationships, trust, and awareness of their common needs" (Wenger, McDermott & Snyder, 2002, p. 82).

The key issues at this stage are to: establish the value of sharing knowledge (*domain*); key develop relationships and sufficient trust to discuss difficult ("sticky") practice problems (*community*); discover what specific knowledge should be shared and how (*practice*). It is important during this stage to hold regular events to build on the initial momentum and enthusiasm of the launch and to allow members to form bonds (Wenger, McDermott & Snyder, 2002, pp. 82-90).

The four McMaster communities of practice were launched in late October and early November 2009. Initially, each community had a wiki for sharing information and documents; all have now decided to create a shared virtual community using the campus learning management software. Each community also has smaller "neighbourhoods" where members can discuss issues of interest to community subgroups.

Stage Three: Maturing

During this third stage (Wenger, McDermott & Snyder, 2002, pp. 97-104), the focus changes from establishing value to clarifying the focus, role and boundaries of the community. The key *domain* issue lies in defining the role of the CoP within the organization and to other domains. The key *community* issue is managing the boundaries of the community as it grows beyond an informal network of colleagues. As the community grows in size, it risks losing sight of its core purpose; as a result, this growth may require the community to restructure itself. The key *practice* issue at this point shifts from sharing insights and anecdotes to stewardship. Maturation is a very active stage for coordinators and those in roles of support as the community identifies gaps in its knowledge and develops a *learning agenda.* "Some communities systematically develop their learning agenda by mapping out what they already now, what they need to know, and the projects and resources they need to fill the gaps. The focus of the community shifts from simply sharing tips and advice toward the broader goal of stewarding knowledge" (pp. 99-100). Designating someone to act as community librarian or knowledge manager is recommended. A process for initiating new members should also be developed, such as having new members be sponsored by an existing member who provides background information about the community's scope, purpose, history, activities and norms of interaction.

Stage Four: Stewardship

In the stewardship stage (Wenger, McDermott & Snyder, 2002, pp. 104-108), "the key *domain* issue is to maintain the relevance of the domain and to find a voice in the organization" (p. 104). In terms of *community* and *practice*, the key issues are to maintain energy and enthusiasm and to remain on the cutting edge.

The following is a suggested work plan for *sustaining momentum*:

- Institutionalizing the voice of the community;
- Rejuvenating the community;
- Organizing a renewal workshop;
- Actively recruiting new people to the core group; and
- Developing new leadership.

Stage Five: Transformation

The radical transformation or death of a community is a natural stage in the lifecycle of every community.

> Changing markets, organizational structures, and technology can render the community's domain irrelevant. The issues that spawned the community may get resolved. The community practices can become so rote and commonplace that they no longer require a distinct community. Or, members may develop such different interests over time that there is no longer enough commonality to hold the community together. Whatever the cause, we have seen communities transform themselves in many ways. (Wenger, McDermott & Snyder, 2002, p. 109)

Some Challenges Related to Communities of Practice

The literature highlights several issues of concern related to communities of practice, some of which are discussed below. First, communities of practice tend to be conservative and to emphasize what has always been done (St. Clair, 2008). Doing it differently—changing practices—impacts the domain of interest, the community itself and the shared knowledge of the members. In essence, it changes the very essence of the community itself.

Size is also an important issue to consider: communities of fifteen members or less are said to be "very intimate", communities of 15-150 members are "fluid and differentiated". Once the membership exceeds 150, the community tends to divide into sub-groups based on topics of geographic location (Wenger, McDermott, & Snyder, 2002, pp. 35-36).

In addition, in her study of virtual communities of practice, Tremblay (2004) identifies three major challenges related to implementing CoPs:

> First, to motivate individuals to participate in the project or the joint enterprise; second, to find the means to sustain the interest of participants but also of the organization which supports the learning project through the CoP; third, to establish a form of recognition (not necessarily monetary) of the participation of individuals, especially if they are expected to devote their time to it. (p. 7)

One of the sources of dissatisfaction identified in Tremblay's study was "...the fact that the majority did not think that the CoP activity would be recognized in their performance evaluation, career progression, and skills assessment" (p. 6). As a result, while participation in the McMaster CoPs will be voluntary, the issue of recognition of participation in a CoP within the *Recognition of Teaching Excellence for Both Career Progress & Merit (CMP)* and *Tenure and Promotion (T&P)* processes at McMaster needs to be addressed.

MEASURING VALUE

Measures of value provide the following benefits to the community:

- Heightening community visibility and creates awareness of its activities;
- Reinforcing member participation;
- Guiding the community's development and providing a basis for prioritizing activities;
- Legitimizing the community's function within the organization. (Wenger, McDermott, & Snyder, 2002, p. 167)

Wenger et al. (2002) propose two complementary methods for measuring value:

1. Demonstrate causality through anecdotal evidence (storytelling)
2. Using quantitative and qualitative measures
    a. *Bottom up*: inventory the diversity and range of community activities, incorporate quantitative indicators from surveys;
    b. *Top down*: identifying organizational goals and objectives and establish how the community is meeting these.

Suggested measures for McMaster University communities could include community membership and activities, knowledge assets created, creation and assessment of performance outcomes. A proposed template for reporting value can be found at the end of this document. Among the success factors for CoPs identified from the literature surveyed by Cremers and Valkenburg (2008), we feel the following measures would be appropriate for use at McMaster:

- Commitment to objectives by all CoP members;
- Balance between self-management and support by the coordinator;
- Adequate use of virtual environment;
- Heterogeneous group with homogenous working practice;
- Cooperation and open attitude;
- Balance between learning and producing results;
- CoP provides stakeholders with knowledge (products);
- Expanded skills and expertise of CoP members (as evidenced by self-reports or possibly by teaching evaluations).

AFTERWORD

This document has been used as a guiding framework to structure and develop the network of Communities of Practice at McMaster University. Since the inception of this project in 2009, Communities of Practice have grown from four communities to ten active groups. As of this date (September 2011), the ten CoPs that exist at McMaster include:

- Accessibility
- Community Engaged Education
- Instructional Assistants
- Level 1 Instructors
- Pedagogy
- Peer Instruction and Active Learning
- Research on Teaching and Learning
- Teaching Professors
- Teaching with Technology
- Writing

For additional information, or if you are interested in developing a new Community of Practice, please contact Kris Knorr, Instructional Designer (knorrk@mcmaster.ca).

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APPENDIX ONE:

SAMPLE OF TENTATIVE TIMELINE FOR LAUNCHING A COMMUNITY OF PRACTICE

STAGE ONE: POTENTIAL	
September	Draft proposal
October	Hold initial planning meetings with (co-)chairs and CLL Publicize community by on listservs, CLL website and Daily News
STAGE TWO: COALESCING	
October	Launch community Hold debriefing meeting with coordinators and establish outcomes for CoP
November—April	Community continues to meet
April	Chairs and CLL meet to review Phase Two

APPENDIX TWO:

COMMUNITIES OF PRACTICE ANNUAL REPORT (DRAFT)

NAME OF COMMUNITY OF PRACTICE:

NAME OF COORDINATOR(S):

REPORTING PERIOD:

PLEASE PROVIDE THE FOLLOWING INFORMATION:

1. Number of meetings/events held:
2. Average number of attendees at meetings:
3. Use of virtual environment
4. Number of members participating in virtual community:
5. Average time spent online per visit:
6. Resources created/shared:
7. Please assess the health of the community (2-3 paragraphs). Possible measures include: the number of meetings held, number of attendees at meetings, the range of community activities, member contributions, use of virtual community, etc.
8. Please describe how the community is meeting the University's goals and objectives (2-3 paragraphs). Possible measures of success include: evidence of impact on members' knowledge and practice, evidence of the value of the community as a mechanism of sharing knowledge and best practices, creation of shared repository of learning objects, etc.
9. Please describe what activities the community will undertake in the upcoming year.