Community of Practice Design Guide

A Step-by-Step Guide for Designing & Cultivating Communities of Practice in Higher Education

How to Use This Community Design Guide

This guide provides a practical approach to creating communities of practice (CoPs) based on experiences working with corporations, nonprofits, associations, government organizations, and educational institutions. While it is important to recognize that every organization and community is different, this guide provides a structure to help clarify the most important design elements that go into defining, designing, launching, and growing CoPs—both online and face-to-face. The first three pages of the guide are designed for those who are considering the strategic use of CoPs to facilitate collaboration, learning, or knowledge generation and want to know more. The subsequent pages of the guide are designed to help CoP designers and facilitators understand the questions, issues, and options involved in planning and cultivating communities.

What Is a Community of Practice?

A community of practice is a group of people who share a common concern, a set of problems, or interest in a topic and who come together to fulfil both individual and group goals.[1] CoPs often focus on sharing best practices and creating new knowledge to advance a domain of professional practice. Interaction on an ongoing basis is an important part of this. A community's specific purpose and goals inform the appropriate activities and technologies that should support it. Many *virtual* communities of practice rely on face-to-face meetings as well as Web-based collaborative environments to communicate, connect, and conduct community activities.

Why Are Communities Important?

Today, organizations, workgroups, teams, and individuals must work together in new ways. Inter-organizational collaboration is increasingly important. Communities of practice provide a new model for connecting people in the spirit of learning, knowledge sharing, and collaboration as well as individual, group, and organizational development.

Communities of practice are important because they:

▶ **Connect people** who might not otherwise have the opportunity to interact, either as frequently or at all.

▶ **Provide a shared context** for people to communicate and share information, stories, and personal experiences in a way that builds understanding and insight.

▶ **Enable dialogue** between people who come together to explore new possibilities, solve challenging problems, and create new, mutually beneficial opportunities.

▶ **Stimulate learning** by serving as a vehicle for authentic communication, mentoring, coaching, and self-reflection.

▶ **Capture and diffuse existing knowledge** to help people improve their practice by providing a forum to identify solutions to common problems and a process to collect and evaluate best practices.

▶ **Introduce collaborative processes** to groups and organizations as well as between organizations to encourage the free flow of ideas and exchange of information.

▶ **Help people organize** around purposeful actions that deliver tangible results.

▶ **Generate new knowledge** to help people transform their practice to accommodate changes in needs and technologies.

How Do You Build CoPs?

Communities of practice are dynamic social structures that require "cultivation" so that they can emerge and grow.[2] Organizations can sponsor CoPs, and through a series of steps, individuals can design a community environment, foster the formalization of the community, and plan activities to help grow and sustain the community. But ultimately, the members of the community will define and sustain it over time.

How Do Communities Grow?

Communities have lifecycles—they emerge, they grow, and they have life spans. For each lifecycle phase, specific design, facilitation, and support strategies exist that help achieve the goals of the community and lead it into its next stage of development. If the community is successful, over time the energy, commitment to, and visibility of the community will grow until the community becomes institutionalized as a core value-added capability of the sponsoring organization. The following model[3] outlines the lifecycle phases of communities.
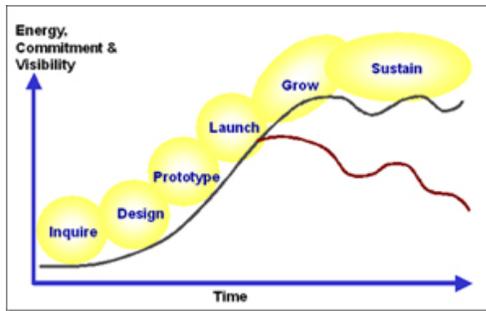
(adapted from McDermott, 2002)

The lifecycle phases include:

- ▶ **Inquire:** Through a process of exploration and inquiry, identify the audience, purpose, goals, and vision for the community.

- ▶ **Design:** Define the activities, technologies, group processes, and roles that will support the community's goals.

- ▶ **Prototype:** Pilot the community with a select group of key stakeholders to gain commitment, test assumptions, refine the strategy, and establish a success story.

- ▶ **Launch:** Roll out the community to a broader audience over a period of time in ways that engage newcomers and deliver immediate benefits.

- ▶ **Grow:** Engage members in collaborative learning and knowledge sharing activities, group projects, and networking events that meet individual, group, and organizational goals while creating an increasing cycle of participation and contribution.

- ▶ **Sustain:** Cultivate and assess the knowledge and "products" created by the community to inform new strategies, goals, activities, roles, technologies, and business models for the future.

Successfully facilitating a CoP involves understanding these lifecycle phases and ensuring that the expectations, plans, communications, collaborative activities, technologies, and measures of success map to the current phase of the community's development. Without conscious facilitation, momentum may be lost during the launch phase and the CoP may not achieve the critical mass needed to evolve into a sustainable entity.

## How Do Online Communities Become Places?

Facilitating community is not a static, one-time event related to "turning on" a software platform or technology. While technology—the *technical architecture*—can assist greatly in providing a platform for communication and collaboration, even more important is the *social architecture* of the community. The technical architecture supports the community, while the social architecture enlivens it. The roles, processes, and approaches that engage people—whether face-to-face or online—are essential in relationship building, collaborative learning, knowledge sharing, and action. Together, technical and social architectures create the container for the community.

An effective approach to community facilitation involves creating a predictable "rhythm" that sets an expectation around how and when to participate in the community. A "sense of place" is created in the minds of community members through an integrated, thoughtful combination of *face-to-face meetings, live online events*, and collaboration over time within a *persistent Web environment.*
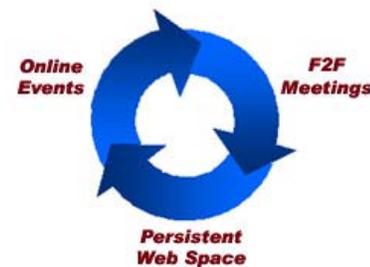
Purpose Is Paramount

While almost every community evolves along a lifecycle, every community is indeed unique, with distinct goals, member characteristics and needs, and purpose. All design choices (for technical or social architecture) must be driven by purpose, so community purpose is paramount. Successful and sustainable communities have focused, well-defined purposes that are directly tied to the sponsoring organization's mission. Purposes should be defined in terms of the benefits to the community's stakeholders and the specific needs that the community will be organized to meet. Purposes can be categorized into the following four areas of activity:
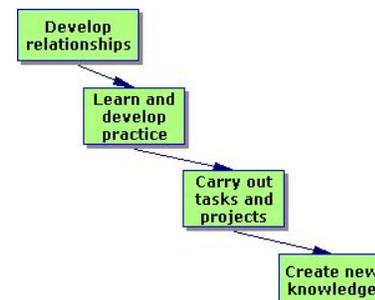
Culture of Inquiry and Evidence and Community Activities

Once purpose has been defined, the next important planning activity is to frame the assessment infrastructure and the language of inquiry and evidence that the community and its stakeholders will use to understand and document success in achieving the purpose, meeting organization goals, responding to needs, and making decisions about future actions. Rubrics for assessment of the effectiveness of community activities have not yet been fully developed; however, the following are general questions to explore in assessing the quality of community design, development, and support in relation to community activities.

1. Foundation: Build Relationships
Develop relationships of trust, mutual respect, reciprocity, and commitment necessary for strong communities.
Interaction with and development of a wider network of peers is sufficient reason to belong to a community for some. Even if the community purpose is broader, other community activities are dependent on an environment of mutual respect and trust, which "encourages a willingness to share ideas, expose one's ignorance, ask difficult questions, and listen carefully."[4] For virtual communities of practice especially, relationships are fostered by frequent synchronous and asynchronous interaction, and this sense of presence of other community members is important to keep members engaged with the community.
Key Questions: *How regularly are members interacting? To what extent do interactions have continuity and depth? Are members "opportunistic" about chances to interact in other settings (conferences, etc.)?Are members taking on new leadership roles? How much and what kind of reciprocity is occurring? To what extent is a shared understanding of the community's domain and approach to practice beginning to emerge?*

2. Learn and Develop the Practice	Community/Practice/Domain	4. Create Knowledge in the Domain
Learn and develop a shared practice, based on an existing body of knowledge.		**Generate and discover new knowledge.**
Practice evolves with the community as a collective product, becomes integrated into members' work, and organizes knowledge in a way that reflects practitioners' perspectives. Successful practice development depends on a balance between "the production of 'things' like documents or tools"[5] and deep learning experiences for community members.		Members go beyond current practice to explore the cutting edge of the domain, to innovate. Community may redefine its boundaries and membership and foster boundary-crossing, possibly working with people from other communities to explore emerging technologies, practices, and ideas.
Key Questions: *How rich and accessible are the community's knowledge representations for existing practice? To what extent does community design support deeper learning for community members[6]?*		Key Questions: *How open is the community to new ideas and leadership? To what extent is the community influential in its domain? Are community members being invited, as community members, to present on leading-edge ideas?*

3. Take Action as a Community
Take purposeful action to carry out tasks and projects
Small group projects, sponsored by the community, help members create personal relationships and also provide a way to produce the resources for developing the practice: cases, effective practices, tools, methods, articles, lessons learned, databases, heuristics, models, Web sites.
Key Questions: *Are collaborative efforts beginning to emerge naturally? Are there community structures to support volunteering for projects and working with others? Are members recognized and rewarded for their contributions?*

The next two sections outline specific issues related to defining the appropriate "social and technical architectures" for a given community. By providing questions that need to be answered at the beginning of each lifecycle stage, community facilitators can apply best practices in community development to their own CoPs. In addition to these key questions, a number of prescriptive activities are described that lead to specific work products. These include documents and presentations that can be used for communication, planning, and the facilitation of the community itself.

1. Inquire
Identify the audience, purpose, goals, and vision for the community.

Key Questions to Explore	Supporting Activities
▶ **Audience:** who is this community for? Who are the community's important stakeholders? ▶ **Domain:** Given the intended audience, what are the key issues and the nature of the learning, knowledge, and tasks that the community will steward? ▶ **Purpose, Goals, and Outcomes:** Given the audience and domain, what is this community's primary purpose? What are the benefits to the stakeholders? What specific needs will the community be organized to meet?	1. Conduct a needs assessment through informal discussions, formal interviews, surveys, and/or focus groups. 2. Define the benefits of the community for all stakeholders, including individual sponsors, individual community members, defined subgroups, the community as a whole, and the sponsoring organization. 3. Create a mission and vision statement for the community, tying these into the sponsoring organization's mission and vision if appropriate. 4. Identify the major topic areas for community content and exploration. 5. Create an estimate of the cost for community technology, special technical development, facilitation, and support. 6. Begin the recruitment of a core team of individuals who represent the community audience.

2. Design
Define the activities, technologies, group processes, and roles that will support the community's goals.

Key Questions to Explore	Supporting Activities
▶ **Activities:** What kinds of activities will generate energy and support the emergence of community presence? What will the community's rhythm be? ▶ **Communication:** How will members communicate on an ongoing basis to accomplish the community's primary purpose? ▶ **Interaction:** What kinds of interactions (with each other and with the content of the community) will generate energy and engagement? ▶ **Learning:** What are the learning goals of the community, and how can collaborative learning be supported? ▶ **Knowledge Sharing:** What are the external resources (people, publications, reports, etc.) that will support the community during its initial development? How will members share these resources and gain access to them? ▶ **Collaboration:** How will community members collaborate with each other to achieve shared goals? ▶ **Roles and Social Structures:** How will community roles be defined (individuals, groups, group leaders, community administrators, etc.) and who will take them on?	1. Identify tasks that community members are likely to want to carry out in the community. 2. Develop a series of scenarios that describe various synchronous and asynchronous experiences of the different personas (identified in the first phase) that would be necessary to carry out the tasks and that demonstrate the potential benefits defined in the first phase. 3. Identify any face-to-face meeting opportunities for community members and define how these will be incorporated into the community experience (conferences, etc.). 4. Lay out a tentative schedule for the community (weekly, monthly, quarterly, and/or annually), 5. Create a timeline for the community's development. 6. Create a directory or folder structure for organizing discussions, documents, and resources. 7. Determine facilitator roles and recruit the first community facilitator(s).

3. Prototype

Pilot the community with a select group of key stakeholders to gain commitment, test assumptions, refine the strategy, and establish a success story.

Key Questions to Explore	Supporting Activities
▶ What short-term pilot goals will help establish the community as a viable and valuable entity? ▶ What community-oriented technologies will be used to support the pilot community's social structures and core activities? ▶ What sort of brand image does the community want to project, given its audience, domain, purpose, and mode of operation? ▶ What are the meaningful metaphors to use with the community's audience? ▶ What is the tone of interactions and activities that facilitators want to model? ▶ How will community identity be formed and shared? ▶ How will success be measured and communicated to the broader stakeholder groups?	1. Select the most appropriate community-oriented technology features to support the goals of the pilot. 2. Design the community environment and have a group test the functionality through case scenarios. 3. Decide on the community metaphor and how it will be represented in the community's organization and appearance. 4. Implement the community prototype and give access to the core team and pilot audience. 5. Seed the community with content. 6. Facilitate events and activities to exercise the prototype, focusing on achieving short-term value-added goals. 7. Ensure that roles are clear and that support structures are in place. 8. Measure success and report on the results of the prototype to sponsors and stakeholders.

4. Launch

Roll out the community to a broader audience over a period of time in ways that engage new members and deliver immediate benefits.

Key Questions to Explore	Supporting Activities
▶ Why should someone join the community? What are the benefits? ▶ What is the business model behind the community? ▶ How do new members learn about the community? ▶ What are the community's norms for behavior? ▶ How do new members become oriented to the community environment? ▶ Based on insights from the pilot, what kinds of community activities will generate energy and engagement and support the emergence of community "presence" (activities, communication, interaction, learning, knowledge sharing, collaboration, roles and social structures)? What will the community's "rhythm" be? ▶ Based on insights from the pilot, how will roles and community social structures be defined and supported over time? ▶ How will success be measured?	1. Using experience and results from the prototype, design and implement the community environment (include graphics that support the community metaphor, predefined content from a variety of sources, prepopulated online discussions, links, databases with best practices and other information, online meeting spaces, etc.). 2. Establish the community charter, which includes an articulation of the mission, vision, goals, and member norms and agreements. 3. Define various roles available for community members, depending on their desired level of participation, goals, and previous experience. 4. Implement communications and marketing plans. 5. Determine the member profile/directory structure. 6. Recruit new members. 7. Set up new member accounts or enable self-joining membership and group affiliations. 8. Provide synchronous welcome to new members when they first log in. 9. Provide orientation to new members. 10. Finalize and publicize a community calendar of events. 11. Design and deliver synchronous and asynchronous events and activities. 12. Set up communication channels (news, announcements, newsletters, integration with face-to-face meetings, etc.).

5. Grow
Engage members in collaborative learning and knowledge sharing activities, group projects, and networking events that meet individual, group, and organizational goals while creating an increasing cycle of participation and contribution.

Key Questions to Explore	Supporting Activities
▶ What are the emerging benefits of the community for members, subgroups, the community as a whole, the community's sponsors, and other key stakeholders? ▶ What are the emerging roles that one could play within the community? What are the different groups to which one could belong? ▶ How do members get recognized and rewarded for their contributions? ▶ How do members create their own community identity and presence? ▶ What work products can members contribute to support individual and community goals? ▶ What are the most important elements of community culture that are emerging that should be recognized and represented in the online environment, as well as in formal policies and procedures? ▶ What are the emerging technical needs of the community environment (e.g., the community-oriented technology/platform and the "place" that it creates) to support the evolving purpose, processes, and community culture?	1. Continue implementation, including facilitation and communication. 2. Create and share stories of individual and community successes (e.g., digital stories) to capture best practices and create excitement and momentum. 3. Identify emerging community roles and recruit members to fill them. 4. Create and assign members to subgroups to support emerging group activities. 5. Conduct a resource inventory (freshness, relevance, usefulness, use) then identify and upload additional content to meet the community's needs. 6. Create opportunities for sponsored projects (projects with defined work products that may or may not require additional commitments from community members and sponsors). 7. Design activities with recognition and awards attached to encourage desired behavior and participation. 8. Conduct focus groups, interviews, surveys, and other data collection activities to assess and measure the success of the community. 9. Facilitate discussions about the community itself, including the community culture, processes and practices, technology, and individual motivations for participating in the community.

6. Sustain
Cultivate and assess the learning, knowledge, and products created by the community to inform new strategies, goals, activities, roles, technologies, and business models for the future.

Key Questions to Explore	Supporting Activities
▶ What are the ongoing community processes and practices that will contribute to the liveliness and dynamism of the community and keep members engaged? ▶ How does the community support members across a wide range of roles? ▶ How are new potential community leaders (official and unofficial) going to be identified, chosen, developed, and supported by the community? ▶ How is persistent community "presence" maintained in the minds of the community members? ▶ To what extent is the community serving its intended audience and accomplishing its stated purpose and goals? How might it do a better job? ▶ How does the community demonstrate return on investment (ROI) for its sponsor(s)? ▶ From the perspective of each individual community member and from that of the community as a whole, what is the perceived return on participation? ▶ How should the knowledge and products created by the community be shared beyond the community?	1. Provide opportunities in the community for members to play new roles, experiment with new community activities, and examine new technology features. 2. Develop a support infrastructure including documentation, mentoring, and development as well as recognition programs for different roles. 3. Ensure that procedures, practices, and the technology support structured data sharing. 4. Identify opportunities for capturing new knowledge, including establishing new roles related to harvesting and creating best practices (e.g., "gardeners," summarizers, synthesizers). 5. Develop policies and processes for harvesting and sharing knowledge outside the community. 6. Encourage publication of articles about the community and its projects. 7. Test for "persistence of presence" by evaluating member and group activity reports as well as member focus groups and surveys. 8. Review community audience, purpose, goals, and domain; watch for shifts in expectations and needs.

Emphasizing the Right Technical Features

The following table summarizes the core technical features found across the four primary areas of activity of most CoPs. Most communities possess a mix of these features as a way to support an integrated approach to relationship building, learning, knowledge sharing, and actionable projects. Consider the table below as a menu. Identify the appropriate combination of features to support your own community's specific goals. In addition, also consider how certain features may be "core" at one phase of your community's lifecycle and how other features may be introduced as your community evolves. For example, in the Prototype and Grow phases, relationship building and learning may be core, while in the Sustain phase, knowledge sharing and project management may become more central.

	Relationships	Learning	Action	Knowledge
Core Technical Features	▪ Distributed account management ▪ Member networking profiles ▪ Member directory with relationship-focused data fields ▪ Subgroups that are defined by administrators or that allow members to self-join ▪ Online meetings/chat ▪ Online discussions ▪ User-controlled delivery modes for notifications and information ▪ Community activity reports	▪ Narrated PowerPoint presentations ▪ E-learning tools ▪ Assessments ▪ Web conferencing and webcasts ▪ Online meetings ▪ Online discussions ▪ Web-site links ▪ Interactive multimedia ▪ Variety of community member roles and responsibilities is supported	▪ Project management ▪ Task management ▪ Document collaboration ▪ File version tracking ▪ File check-in and check-out ▪ Instant messaging ▪ Web conferencing and online meetings ▪ Online discussions ▪ Individual and group calendaring ▪ Subgroup working spaces	▪ Keyword and full-text searches (site-wide and by section) ▪ Structured databases and database tools ▪ Digital stories ▪ Idea banks ▪ Web conferencing ▪ Online meetings ▪ Online discussions ▪ Announcements ▪ Web-site links ▪ Multiple modes for knowledge representation ▪ Resources directly associated with interaction

For a detailed set of draft functional requirements for use in evaluating community-oriented technologies, see http://www.educause.edu/nlii/VirtualCommunities/944.

For more information

For more information about the NLII and the Virtual Communities of Practice Initiative, please see http://www.educause.edu/VirtualCommunities/576. For information about VCOP resources, see http://www.educause.edu/VirtualCommunities/944.

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[1] Etienne Wenger, Richard McDermott, & William Snyder, *Cultivating Communities of Practice: A Guide to Managing Knowledge* (Boston, MA: Harvard Business School Press, 2002).

[2] Wenger et al

[3] Adapted from McDermott, 2002

[4] Wenger, et al, p. 28

[5] Wenger, et al, p. 39

[6] See NLII web site, "Mapping the Learning Space," for more information on deeper learning principles (http://www.educause.edu/MappingtheLearningSpace/2594), and a related draft observation tool, "Community Learner-Centered Principles/Practices Guide" at http://www.educause.edu/VirtualCommunities/944.