LTER IMC Community of Practice:
A Learning Environment

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What are communities of practice?

"Communities of practice (CoP) are formed by people who engage in *a process of collective learning i*n a shared domain of human endeavor, e.g., a group of engineers working on similar problems, a band of artists seeking new forms of expression, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope…" (Wenger, 2008).

Communities of practice are groups of people who share a concern or a passion for something they *do* and *learn* how to do it better as they interact regularly. A community of practice is not merely a group of people having the same job or a network of connections between people.

Three crucial CoP characteristics are:

1. The domain: the CoP identity is defined by a shared domain of interest. Membership implies a **commitment** to the domain, and therefore a **shared competence** that distinguishes members from other people.
  LTER Case:
   Research domain: ecology, information science, computer science sociotechnical or human-computer interactions
   Practice domain: informatics
   Development domain: systems design
   Communication domain: communication studies, science & technology studies, infrastructure studies

2. The community: Members build **relationships** that enable them to learn from each other through engaging in joint activities and discussions, and information sharing.
  LTER Case
   relationships: working groups, LTER Information Management Committee, site-site, site-network, LTER Network Information System Advisory Committee
   activities: annual LTER IMC meetings. best practices, collaborative design of modules & tools – training

3. The practice: A community of practice is not merely a community of interest. Members are practitioners - they are **engaged in doing the work.**
  LTER Case:
   data gathering, data organizing, data describing, data preparing, quality control, data analysis, data synthesis, data exchange, data processing, IT evaluation, informatics research, technology development, assessment, informatics research, federation inquiry, community-building, remote sensing, site-network coordination
 And more:
   working groups, module development, prototyping, articulation, negotiation, knowledge mediation, standards-making, infrastructure-building, informal and formal communication facilitation

Why our community of practice is important!

We have an organizational structure and a way of working that supports communications, a social organization for mentoring, a learning environment, a strategy for standards building, a mechanism for comparative analysis of experiences, a group identity… and more!

With this foundation, how do we approach cyberinfrastructure and change?

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