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Communities of IT supporters

Learning aim

- Identify groups with different supporter roles
- Specify conditions for these groups developing into communities of practice

- Literature
  - Chapter 12

Pedagogical theories

Behaviourism
- Observable behaviour
- Learning is a relatively stable change of behaviour

Gagné-Briggs principles of instruction
Kirkpatrick model of evaluaton

Constructivism
- New competence based on what we already know
- We learn through reflection on experience
- We construct our own knowledge

Competencies
Learning processes
Externalisation models

Socio-cultural learning theory
- Community of practice
- Developing a shared repertoire of behaviour
- Learning is becoming a member of the community

Learning from peers
Superusers
Information officers

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Communities of Practice - CoP

Shared domain of interest
- Members learn from each other

→ Shared competence

Engagement in joint activities
- Not necessarily daily

Shared repertoire of practice
- Tools
- Experience
- Ways of addressing problems

Examples
- Farmers in a village
- Cleaners in a hosiptal
- English teachers in a district who meet every month for exchanging experience
- Busdrivers in a bus company
- Footballplayers meeting every week for fun

Learning in CoP

- Internalisation of explicit understanding
  - Developing common patterns of practice
  - Preference to skills

→ Provide isolated practitioners with access to colleague

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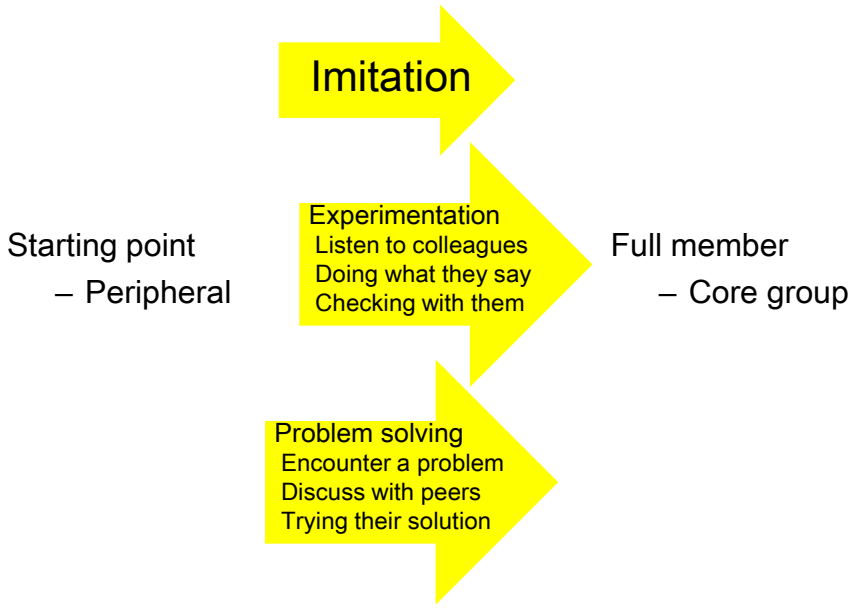
Becoming a member



Interactions between CoPs

Boundary interactions
- Members form different CoPs take part in common activities

Boundary objects
- Object making sense to more than one CoP

Broker
- Member of two CoPs
- Can introduce practice from one into the other

Examples

Teaching

Support

Computer application

Printer

Accountant
- Accountants
- Managers

Superuser
- User community
- IT community

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IT companies

- Communities of IT-practice
- Developer groups
- Support groups
  - Helplines
  - E-mail groups

IT departments

- Network administration
- Support
  - Possibly several layers of support
- Keeping track of
  - Users
    - Configuration of their IT system
  - Requests
    - Database on question and answer

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Information officers

- Non-IT professionals
- Data management as core work task
  - accountants keeping the books
  - clerks doing data entry
  - statisticians producing reports
  - archivists storing and retrieving files.
- Groups in central departments
  - Communities of IT practice
- Individuals scattered in the organisation
  In need of communication with peers
  - in order to participate in a community of IT practice
- Providing support for users
- Teaching users in training courses

Superusers

- Specific computer skills
- Helping colleagues
- Main domain different from IT and data
- Participates in the community of practice of their main domain
- Individuals scattered in the organisation
  In need of communication with peers
  - in order to **also** participate in a community of IT practice

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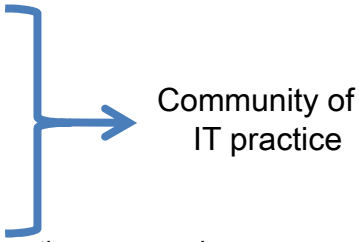
Superusers in a local health administration

Superusers should

- Be selected amongst
  - People who are frequently asked for help
  - People who have an interest in computing
  - Avoid local managers
- Be well trained in the computer system and also in supporting others
- Have responsibility and resources within their area
- Be included in the planning of support
- Participate in the user training
- Be organized
  - Belonging to a group
  - Sharing experience
  - Receiving updates
- Communicate user requests to the computing personnel
- Communicate system updates to the users



Users

- Communities of non-IT practice
  - IT a tool for getting their core tasks done
  - Learning of IT of secondary priority

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Public institution in USA

- 3000 employees
- Legacy IS → Enterprise Resource Planning (ERP)
  - Semi finished software covering all functions of a company
  - Tailoring
    - Configuration by parameters designed by the vendor
    - Customisation by adding functionality
  - Efficient data processing
  - Long and costly adaptation
  - Freezes the organizational structure
- Technical installation on time and on budget
- Voluntary training
  - Few attended

Boudreau and Robey (2005) Enacting Integrated Information Technology: A Human Agency Perspective

Three types of agency

Inertia
- Limited use
- Avoidance
- Superficious

Improvised learning
- Initiated by users
- No predetermined structure, schedule or method

Reinvention
- Compensating for limited knowledge and perceived system deficiencies
- Workarounds
- Using the system in unintended ways

I'm not doing things online yet. I'm by printing off a copy and then I fill it in and then send it through to power users

I can't tell you how many things that we learned, not because of training, not because the trainers knew it, but because somebody figured it out, and it became kind of folk knowledge

On a purchase order, if you find that you have to add money, you can't just go and change the line amount. It's not going to work; somthing is going to happen and Disbursements won't be able to pay it. So, a workaround we have here is to add an additional line to say "Increase PO by x amount of dollar" just so the dollar amount equals what you need it to be equal.

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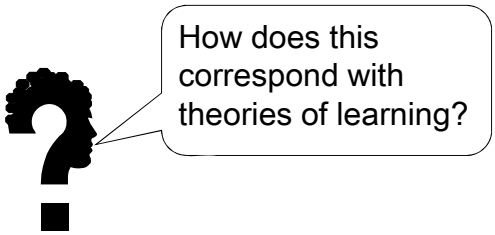
Explanation of Inertia → Reinvented use

- Social pressure
  - Managers
  - Power users
  - Peers
- Improvised learning
  - Power users
  - Peers
  - User groups
  - Collections of material
  - E-mail
  - Individual



Training

- Trainers are the minority
  - Activity where IT constitutes the main domain
- Several users who work together in training
  - Can continue their IT conversations when back at work
  - Strengthened by conversations with
    - Superusers
    - Information officers
    - IT staff

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Training – the teachers

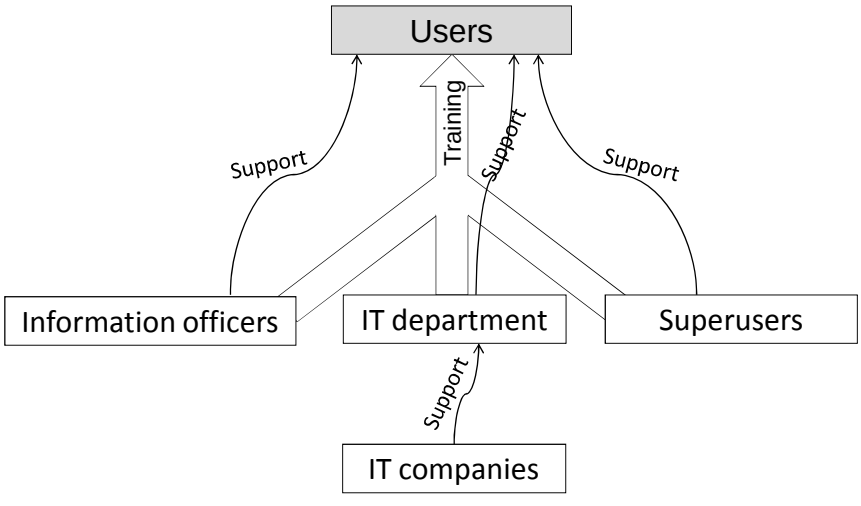
Teachers

- Information officers
  - Bringing the domain of the information system into the training
- IT support personnel
  - Bringing the technological competence into the training
- Superusers
  - Bringing the users' main tasks into the training

Teachers' main competence

- Representation of the domain
- Technology
- Tasks

The IT competence chain



Representation of domain **IT** **Tasks in work practice**