

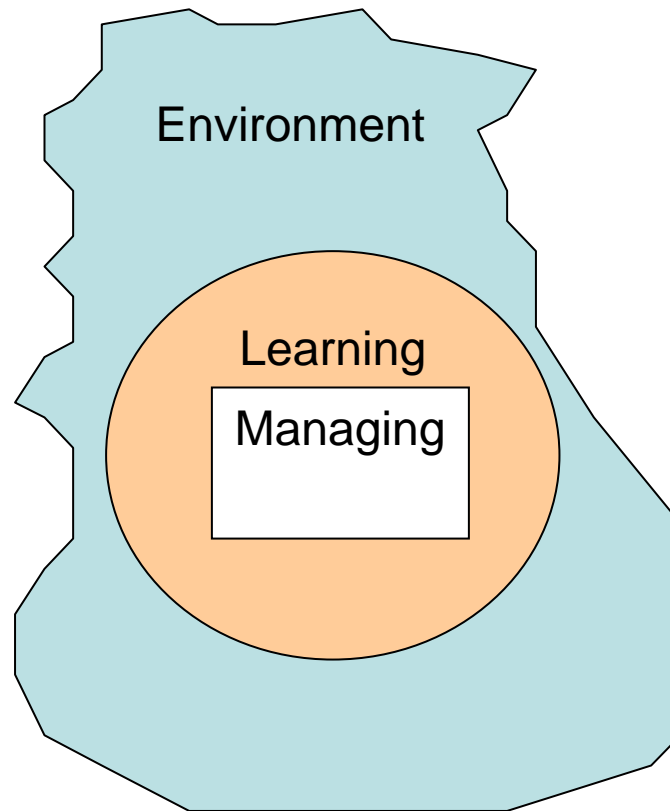
# Technology Supported Learning Environments

User owned and personal technologies

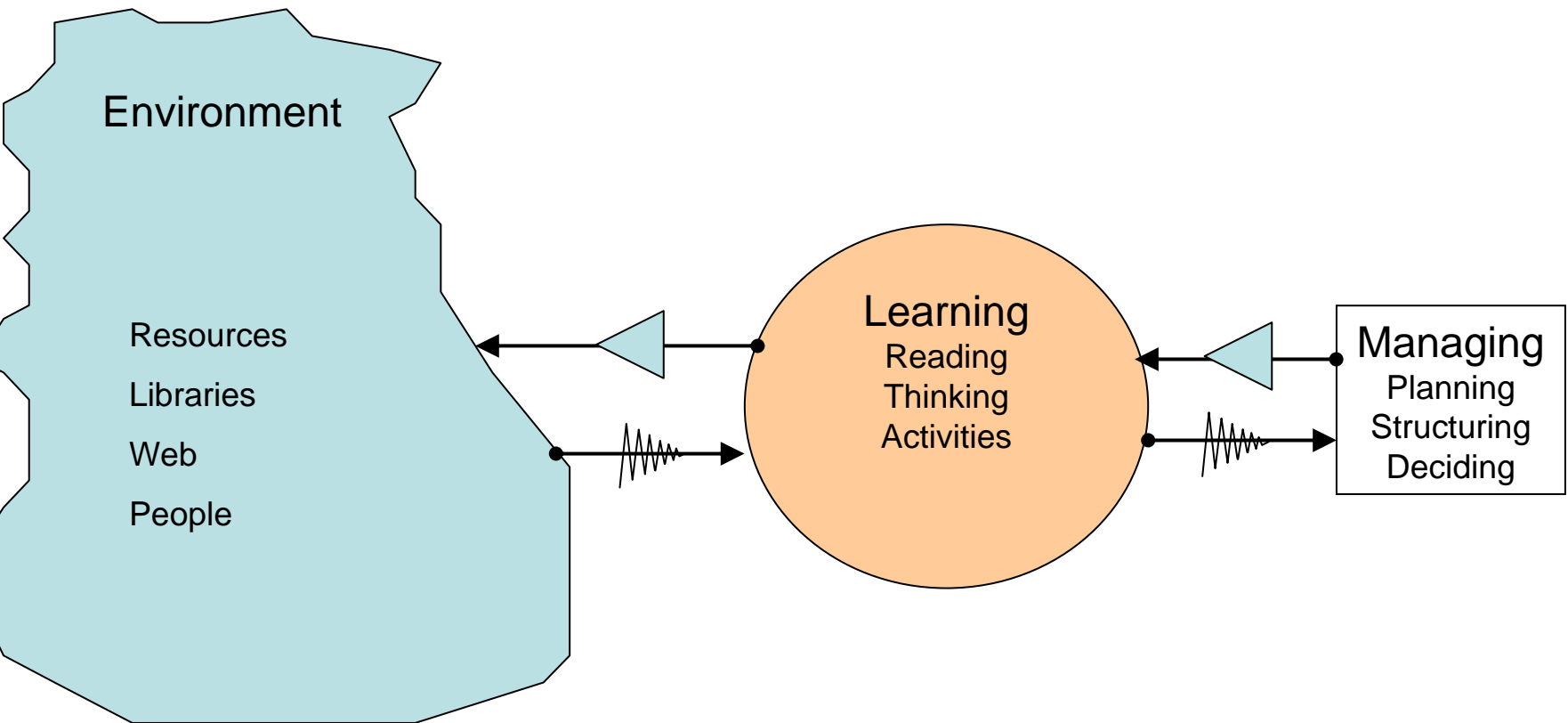
Oleg Liber & Wilbert Kraan

CETIS

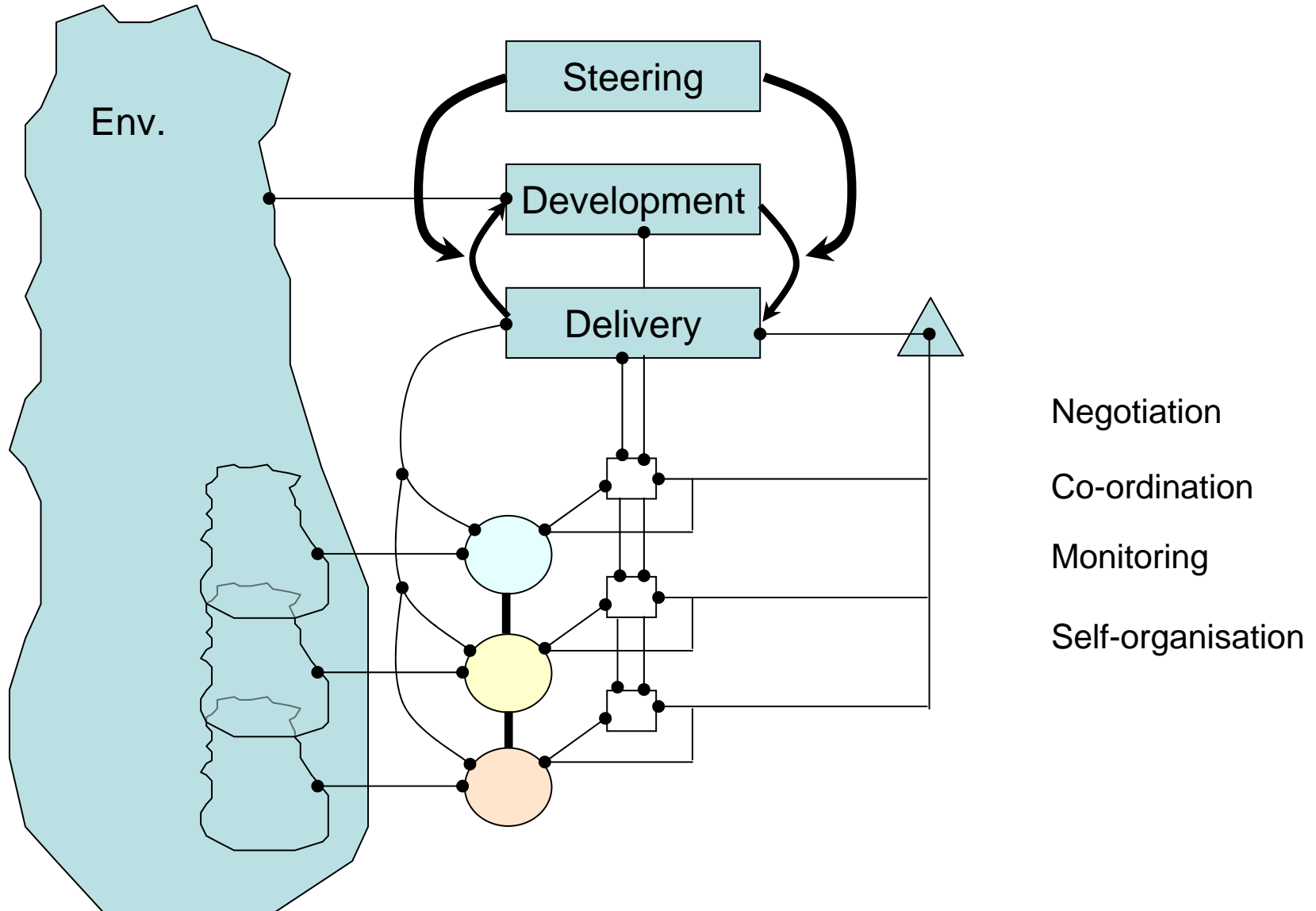
# Modelling a student on a course using the Viable System Model



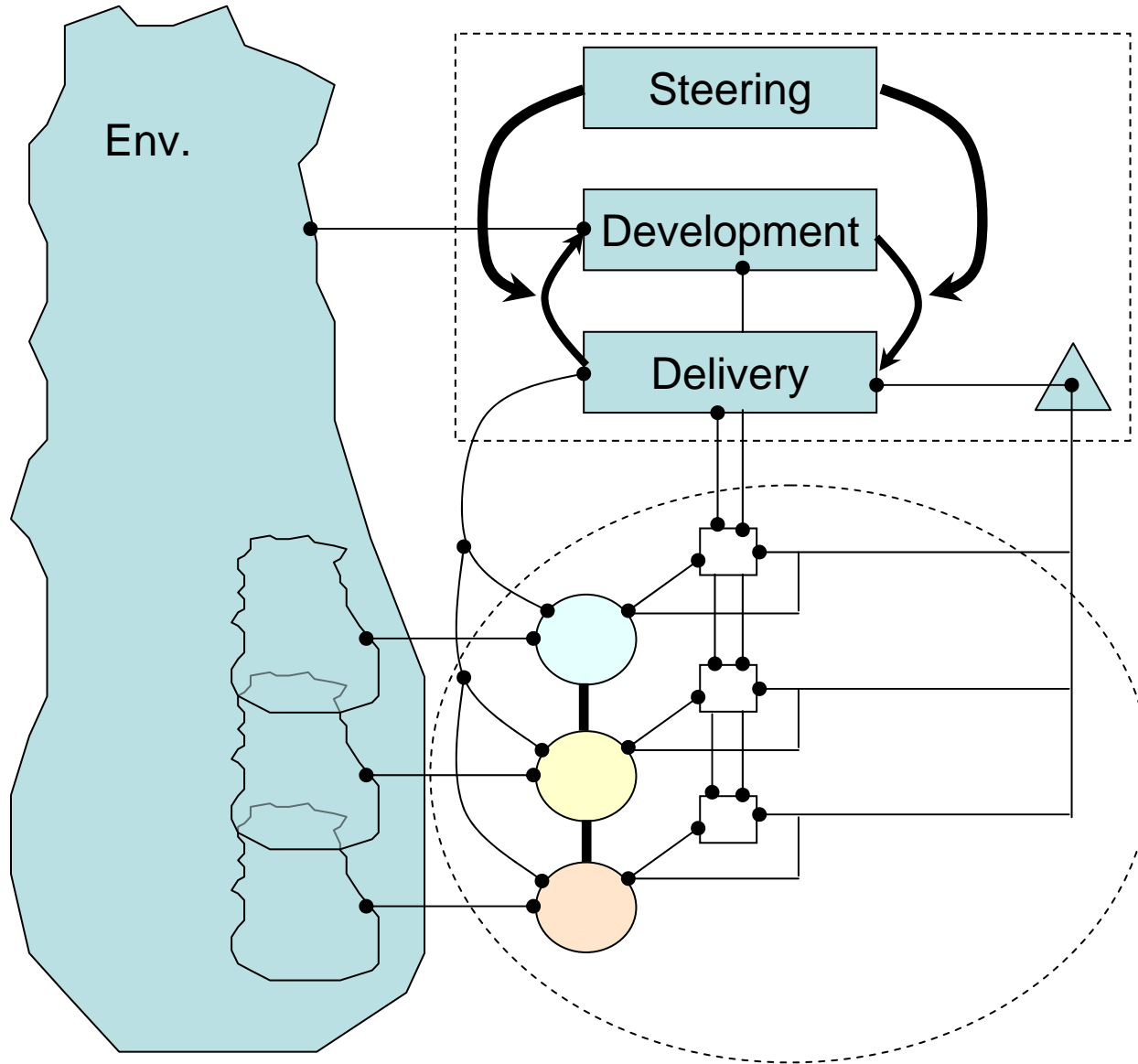
# Modelling a student on a course using the Viable System Model



# Managing a course

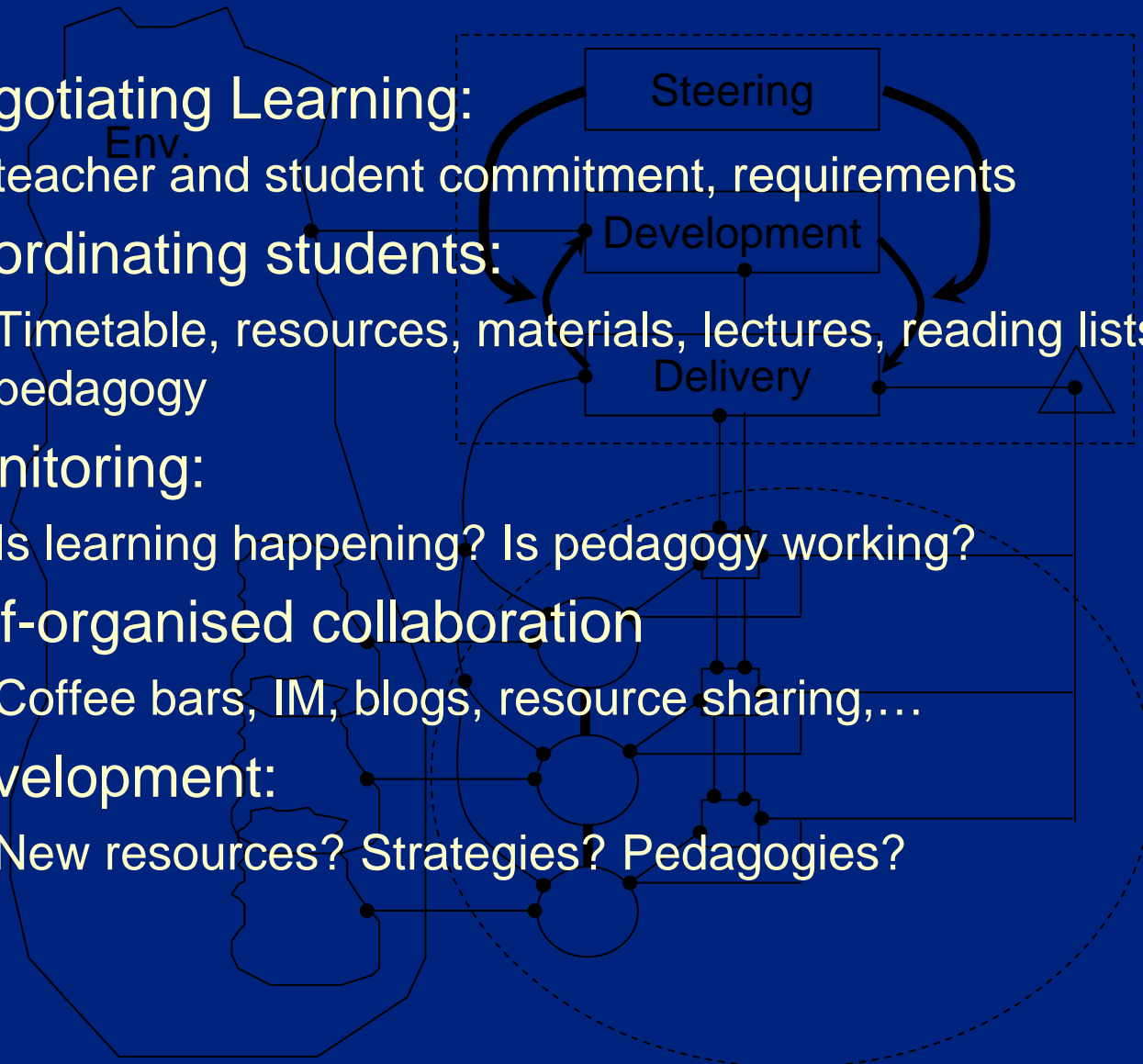


# Course-centric view: the VLE

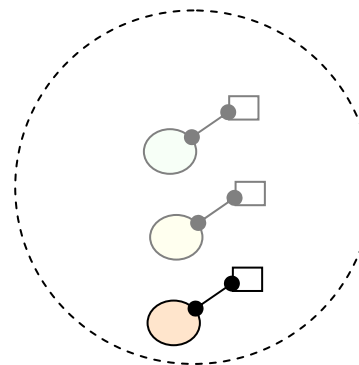
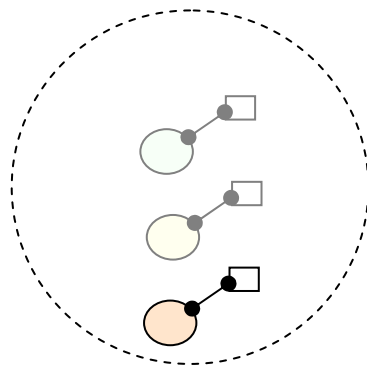
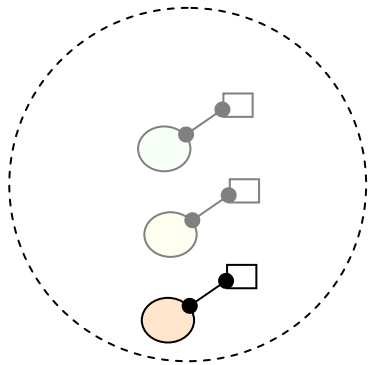
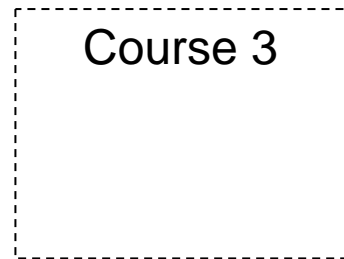
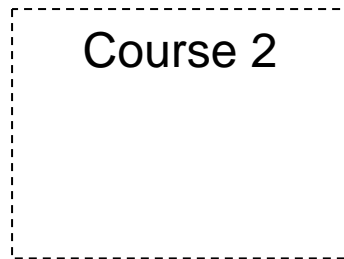
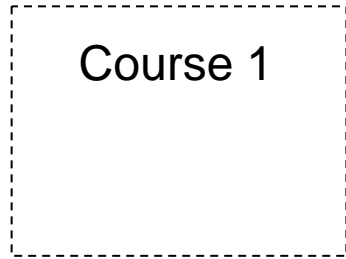


# Course management

- **Negotiating Learning:**
  - teacher and student commitment, requirements
- **Coordinating students:**
  - Timetable, resources, materials, lectures, reading lists, activities, pedagogy
- **Monitoring:**
  - Is learning happening? Is pedagogy working?
- **Self-organised collaboration**
  - Coffee bars, IM, blogs, resource sharing,...
- **Development:**
  - New resources? Strategies? Pedagogies?

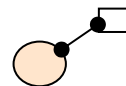
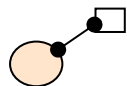
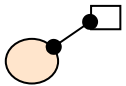


# Multiple learning contexts

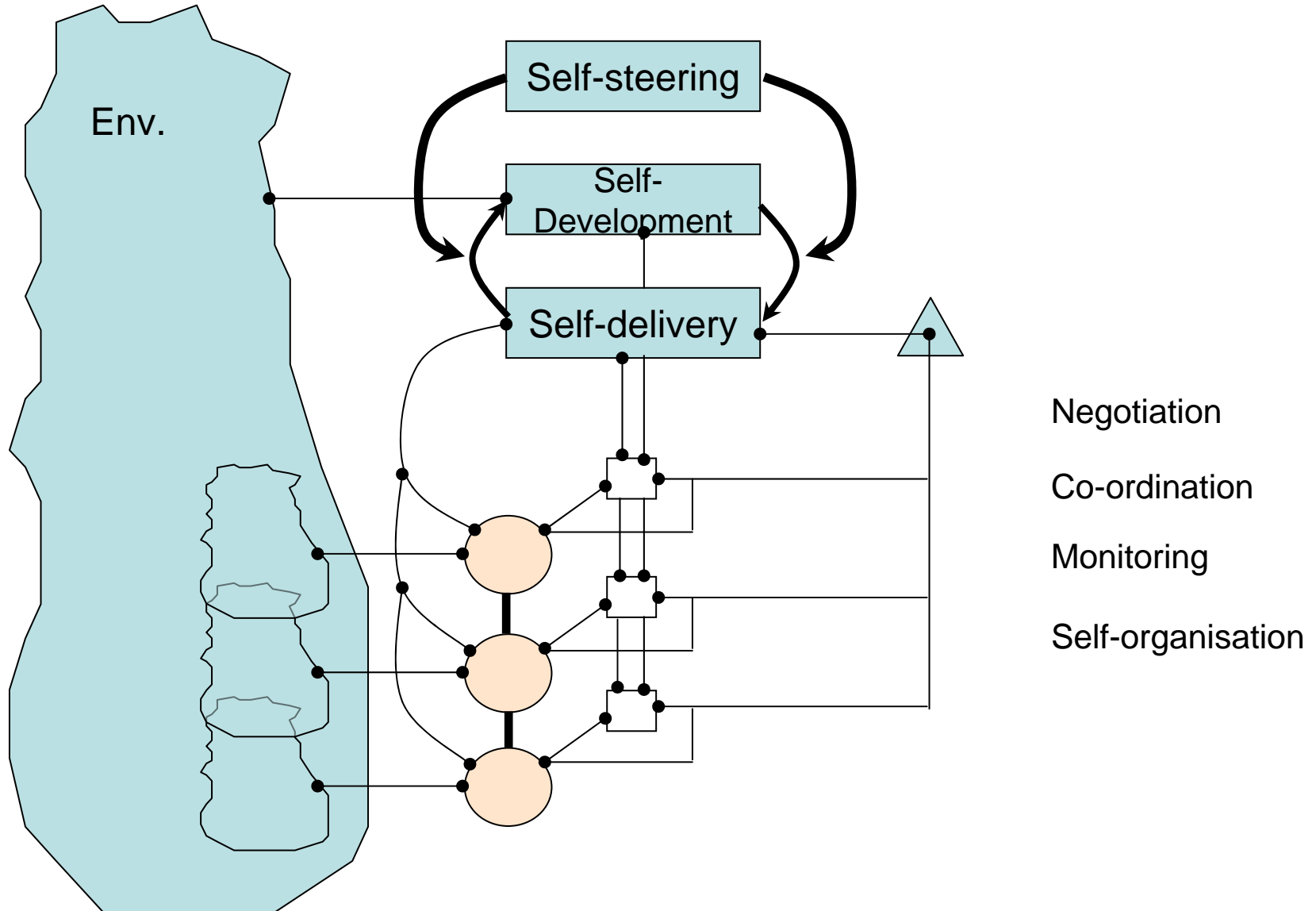


Our Student

# Joining up the fragments

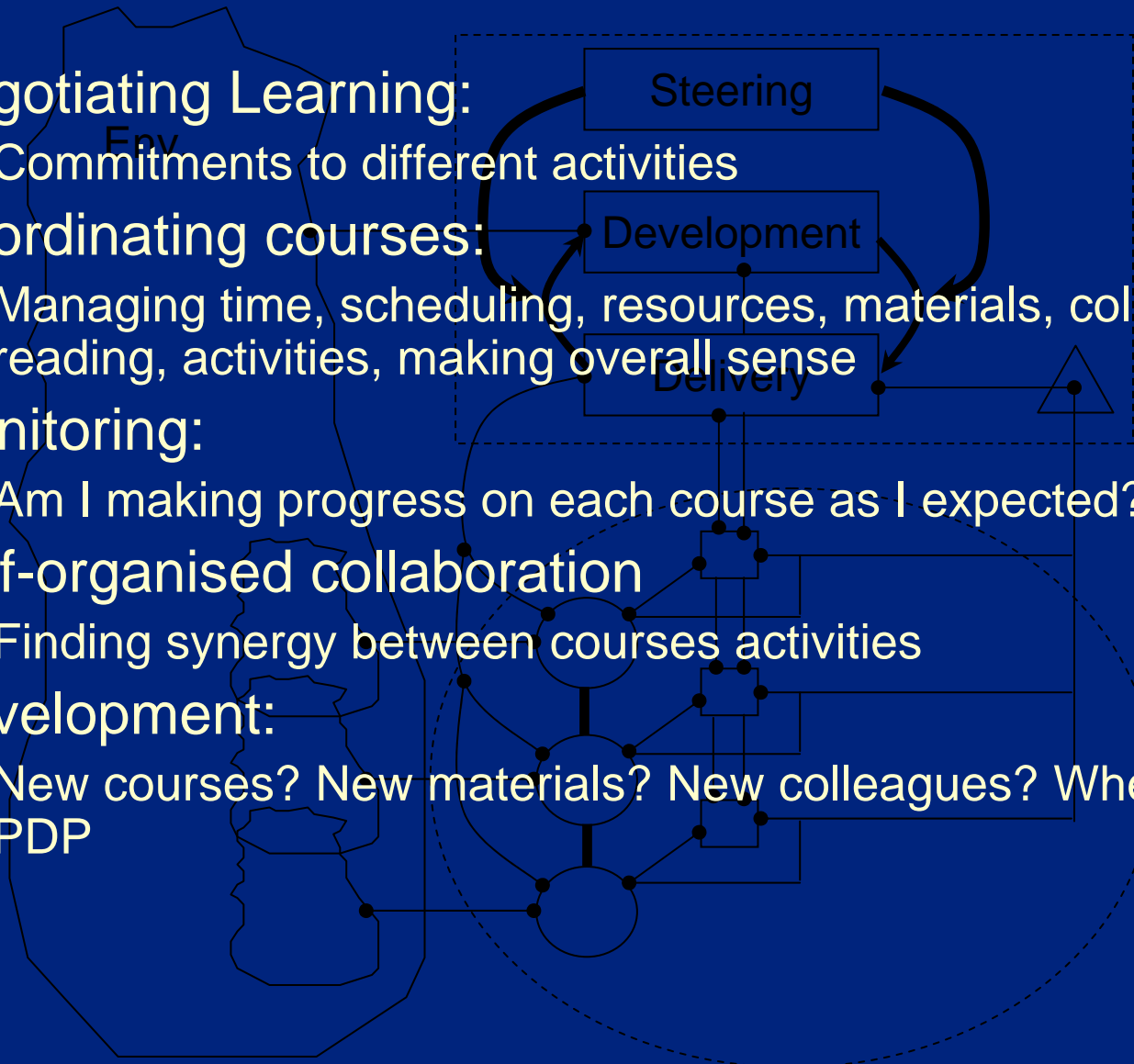


# Student on many courses: the PLE



# Self management

- **Negotiating Learning:**
  - Commitments to different activities
- **Coordinating courses:**
  - Managing time, scheduling, resources, materials, colleagues, reading, activities, making overall sense
- **Monitoring:**
  - Am I making progress on each course as I expected? - reflection
- **Self-organised collaboration**
  - Finding synergy between courses activities
- **Development:**
  - New courses? New materials? New colleagues? Where next?  
PDP



# Personal Learning Environment

- Personal management tools
- External services in the broader environment
  - Institutional
  - On the wider web
  - Content/resource services
  - People services
  - Interaction/activity services
  - ...

# Managing commitments

- Oxford: do people want to connect internal and external interests?
- Easier for CPD type courses?
- RB: Microformat skin
- Learners/teachers?
- Persistence of environment
- Prioritisation
- Use social networks to help with commitment decisions

# Coordinating time, resources, people, institutions

Standards

RSS, FOAF

Increased flexibility and choice for learners to  
coordinate how they want

# Self Monitoring

- Teacher monitoring
- Feedback from...
- Model questions
- Structured reflection
- Discussion spaces
- Trust network: peer review, informal assessment
- Sending your learning out

# Making connections

- Tagging? Trust levels in tags... dynamic map
- Pre-university groups:
- Social space for inter-course communications
- Student societies use facebook –personal and group homepages

# Personal development planning

# Managing identity

# The modern learner

- Will learn in many contexts
  - University, workplace, informally
- Wants to control when and how they learn
  - Not tied to timetables
- Will learn continuously
  - CPD, work-based, interest driven, personal development
- Needs tools to help synergise learning
  - Personal tools
  - Portfolio
  - Extra-institutional

# Defining Personal Learning Environments – a pattern approach

- **Context patterns**
  - setting-up (and destruction) of relationships – either between a tutor and a student, or a student and other students in a learning relationship; e.g. navigating and joining courses,
- **Conversation patterns**
  - Mechanisms for maintaining conversations in learning, including support for moderation and collaboration; e.g. editing, managing, structuring
- **Network patterns**
  - communication between an end-user tool and a service; conduits (accounts), feeds, protocols
- **Resource patterns**
  - the actual content of the data that is transferred and its categorisation into particular forms, and the services which relate to its acquisition; e.g. search, folders, sharing/publication, rating

# Defining Personal Learning Environments – a pattern approach

- **Social**
  - These patterns relate to the management of personal profiles together with the management of other social contacts and contexts (buddy lists, presence, blacklists)
- **Team**
  - management of groups which may be formed from the sharing of practices. (teamlists, teamfeeds)
- **Temporal**
  - management of personal time (calendar services, alarms, todo lists, sequencing etc.)
- **Activity**
  - The nature of the activities which people undertake when learning (e.g. collaborations.)
- **Workflow**
  - The organisation of the sequenced activities, which may include technologies to support the management of commitments made by both student and teacher (e.g. learning designs)

# Key Services

- Activity Management (coordination of resources and people)
- Workflow (sequencing of activities)
- Syndication and Posting (access to content, feeds)
- Rating and Annotation (resource management)
- Group (management of people and social networks)
- Presence
- Exploration and Trails (finding opportunities)
- Personal Profile (identity, portfolio)

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<http://wiki.cetis.ac.uk/ple>