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Facilitating maturing of socio-technical patterns through social learning approaches

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- **Interventions** in organizations, for improving learning, processes, or similar:
- Often wider **social and motivational aspects** are forgotten or insufficiently dealt with
- **Problem:** issues are complex and depend on experiences
- How to represent these **experiences** and make them accessible?

- Pioneering research in architecture by Christopher Alexander
- Structured description that provides a generalized and condensed description of proven solutions
- **Problem:** what kind of problem was solved?
- **Solution:** how was it solved?
- **Context:** under which conditions does the solution represent a solution to the problem?
- **Evidence:** examples or evaluation results
- More attributes are typically added

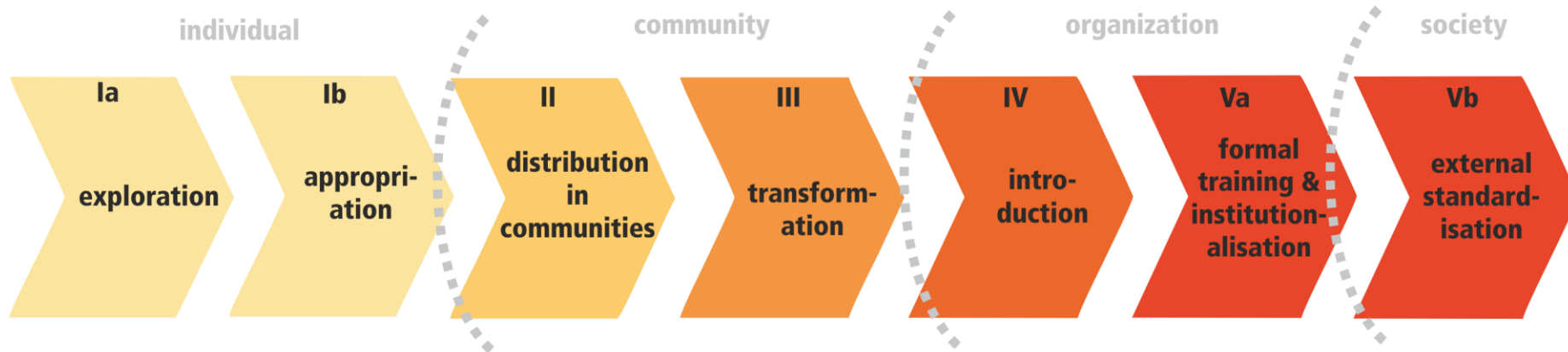
- But how about **affective** aspects, **motivation**?
- These are particularly difficult to elicit and discuss because of social expectations and accepted behavior
 - Emotions at the workplace?
 - Being not motivated?
- But they are often at the core of the problems!
- MATEL
<http://matel.professional-learning.eu>

Problem: How can socio-technical patterns be developed and used on a continuous basis?

- What is captured in patterns?
- **Patterns represent collective knowledge** about
 - understanding the specified problem
 - possible solutions (and their contextual dependencies)
 - and evidence about it (examples)
- So **pattern development is a collective learning process**
 - ... for which knowledge maturing is a model

Maturing of Pattern Knowledge

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individual experiences

awareness of soft aspects

technology-enhanced peer coaching & reflection

individual generalizations

sharing of soft aspects

collective generalizations

conversations

proto patterns

structure of patterns

patterns

accumulating sound evidence from multiple cases

social learning programmes

pattern collection

conversations around meta-structure

living documents

Challenges for pattern maturing

A social learning tool chain

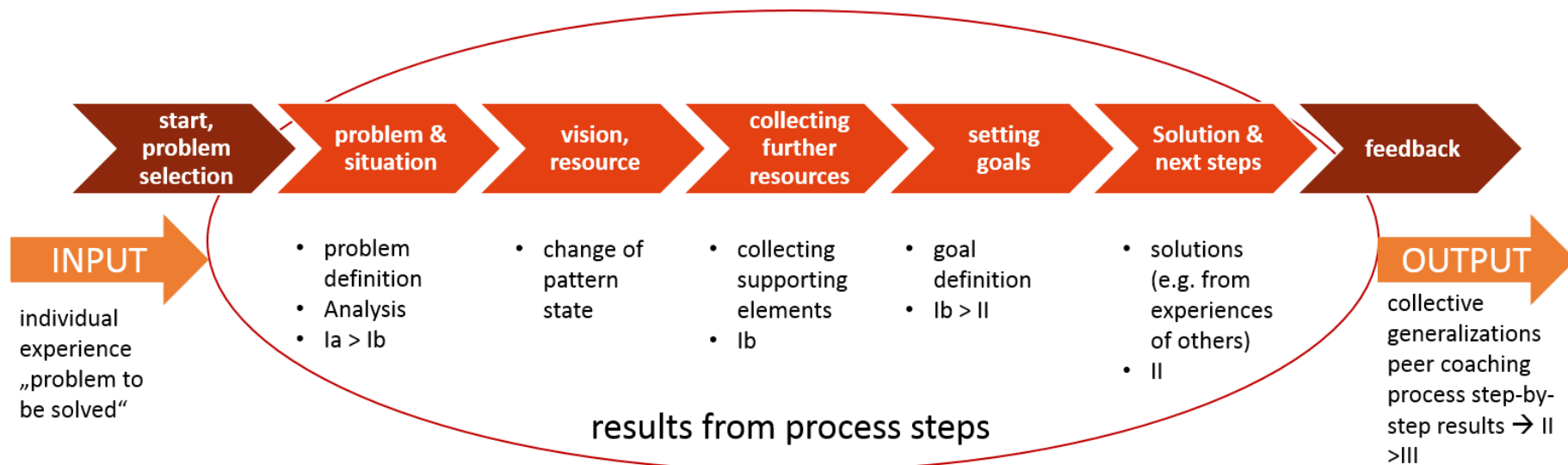
- **How can we improve the activities of becoming aware of soft aspects and sharing them effectively?**
 - Peer coaching
- **How can we improve the creation of a structured representations in a conversational space?**
 - Living Documents
- **How can we improve spreading proto-patterns and invite others for larger-scale conversations?**
 - Social learning programmes

- **Individual driven.** Patterns arise from challenging situation for which peer coaching is sought
- **Spreading to others.** Advisers become aware of similar problems in their own context and engaged in connecting problems with solutions
- **More depth.** Structured peer coaching process promotes solution-orientation and ensures deeper investigation including affective aspects of the individual.
- **De/Re-Contextualization.** Client is facilitated to decontextualize his problem, the advisers suggest decontextualized solution opportunities, and within the session, this is recontextualized for a concrete solution plan.

Peer Coaching as a structured process for early maturing phases

- **Structured process**

- to help an individual („client“) to find possible solutions to a specific issue
- with support from peers („advisers“) and a moderator



Standards of Medical Care in Diabetes 2015

Edit tags Diabetes 2015

Standards of Medical Care in Diabetes 2015

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1 **I. CLASSIFICATION AND DIAGNOSIS**

2 **A. Classification**

3 Diabetes can be classified into four clinical categories:

4 **c Type 1 diabetes** (due to b-cell destruction, usually leading to absolute insulin

5 deficiency)

6 **c Type 2 diabetes** (due to a progressive insulin secretory defect on the background

7 of insulin resistance)

8 **c Other specific types** of diabetes due to other causes, e.g., genetic defects in b-cell

9 function, genetic defects in insulin action, diseases of the exocrine pancreas (such

10 as cystic fibrosis), and drug- or chemical-induced (such as in the treatment of HIV/

11 AIDS or after organ transplantation)

12 c Gestational diabetes mellitus (GDM) (diabetes diagnosed during pregnancy that

13 is not clearly overt diabetes)

14 Some patients cannot be clearly classified as type 1 or type 2 diabetic.

15 Clinical presentation and disease progression vary considerably in both types of

16 diabetes. Occasionally, patients diagnosed with type 2 diabetes may present

17 with ketoacidosis. Children with type 1 diabetes typically present with the

18 hallmark symptoms of polyuria/polydipsia and occasionally with diabetic

19 ketoacidosis (DKA). However, difficulties in diagnosis may occur in children,

20 adolescents, and adults, with the true diagnosis becoming more obvious

Chat 0

Comments (2)

New comment

Add comment

David Zaki a few seconds ago

How can I differentiate between Type 1 and Type 2 Diabetes?

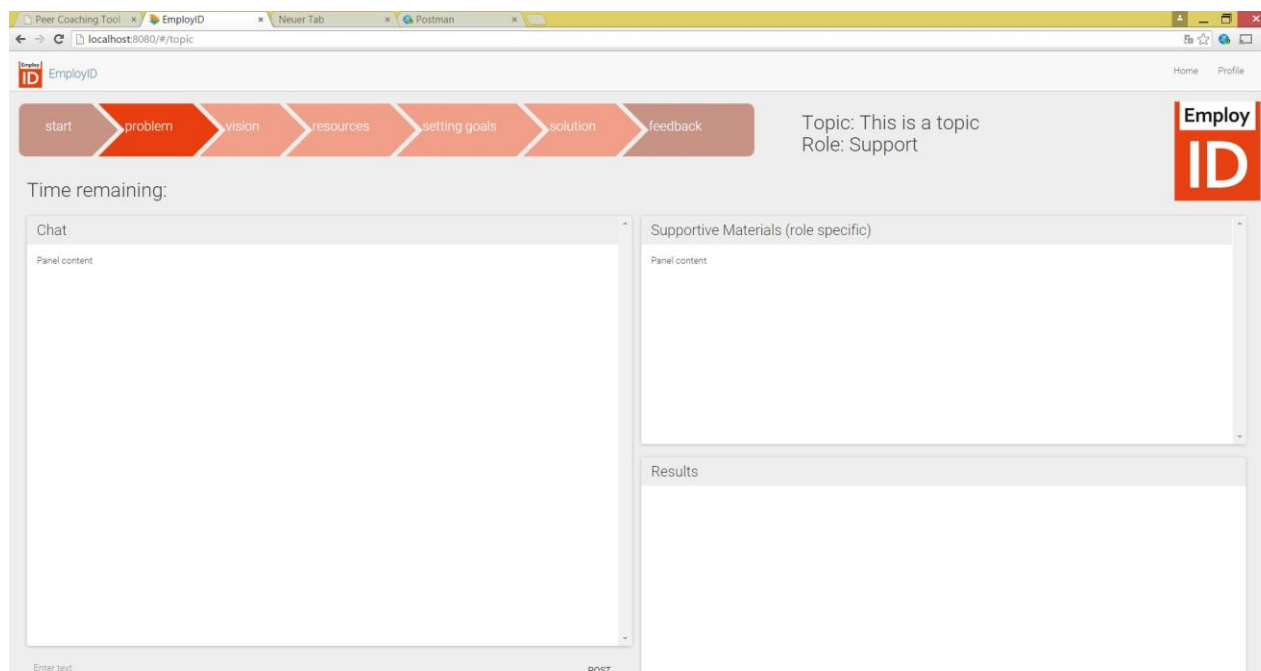
1 agreed

Reply Agree Delete

Living Documents

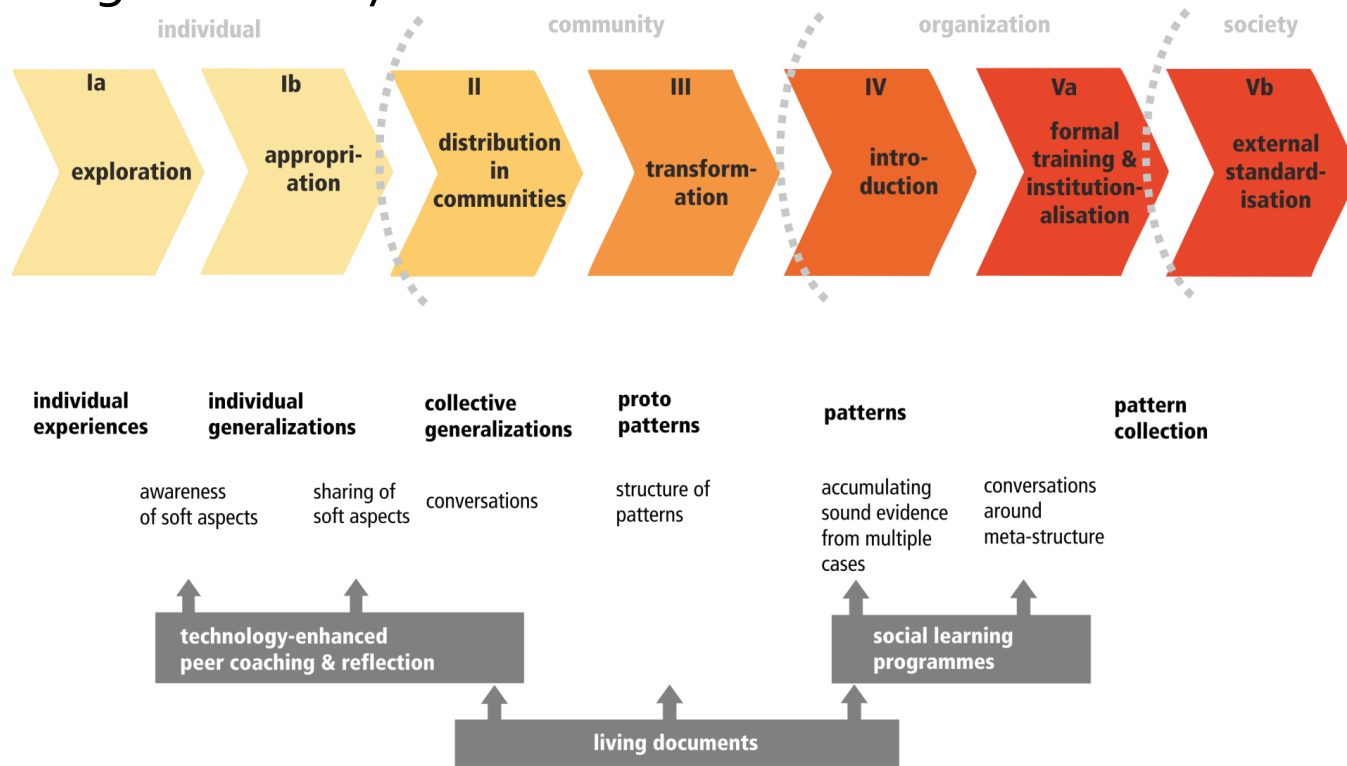
Conversations around documents

- **Integrated** into peer coaching tools
 - Just for the closed peer coaching group
 - But can be shared with a wider audience
- **Promotes the transition** from peer coaching session minutes into proto-patterns
 - the group needs to agree on how to deal with potentially confidential details.



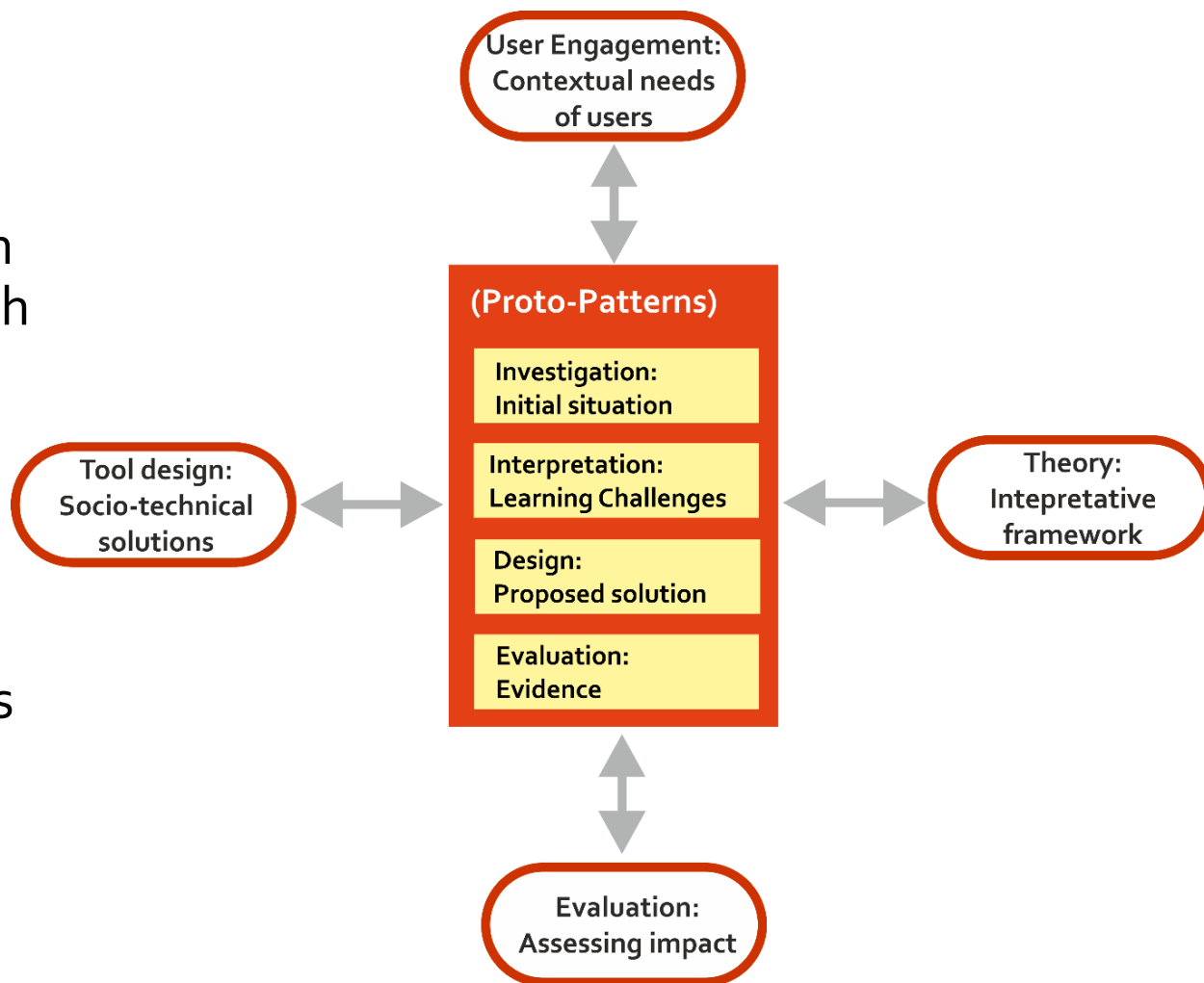
- MOOCs without the massive:
 - open spaces
 - prepared instructional material
 - spaces for social exchange among the participants.
- **Proto-patterns** are presented to a larger audience
 - proto-patterns act as a trigger and catalyst for participants join the conversation and contribute their experiences
 - combination of the different experiences and integration with existing proto-patterns (and possible refactoring) can happen through the living documents system.

- The pattern approach introduces a solution focus into social learning and captures also soft aspects.
- Particularly peer coaching is well suited for early maturing phases, but needs follow-up activities for summarizing and sharing effectively.



Outlook: Patterns as boundary objects in research projects

- Build the solution focus into project management, e.g., in collaborative research projects
- Goal: relevant and transferrable results from design and prototyping activities and reflecting on experiences in practice





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