

Methodology of DWR

Pentti Hakkarainen

Lithuanian University of Educational
Sciences and University of Oulu

Basic assumptions & claims

- How culturally new is created ? (Engeström 1987)
- Two stages of the ZPD: 1. On the level of culture (in working life), 2. Individual ZPD's connected to the cultural ones
- Specific learning processes are needed, which help to break daily work routines: Bateson's 'learning three' is used as an example (Bateson 1972, Steps to an ecology of mind)

BATESON'S LEVELS OF LEARNING

- ZERO LEARNING: right or wrong reactions
- LEARNING I: change in the specificity of response by correction of errors of choice within a set of alternatives.
- LEARNING II: change in the process of Learning I, e.g., a corrective change in the set of alternatives from which a choice is made, or it is a change in how the sequence of experience is punctuated.
- LEARNING III: change in the process of Learning II, e.g., a corrective change in the system of sets of alternatives from which a choice is made.
- LEARNING IV: change in Learning III, but probably would not occur in any adult living organism on this earth.

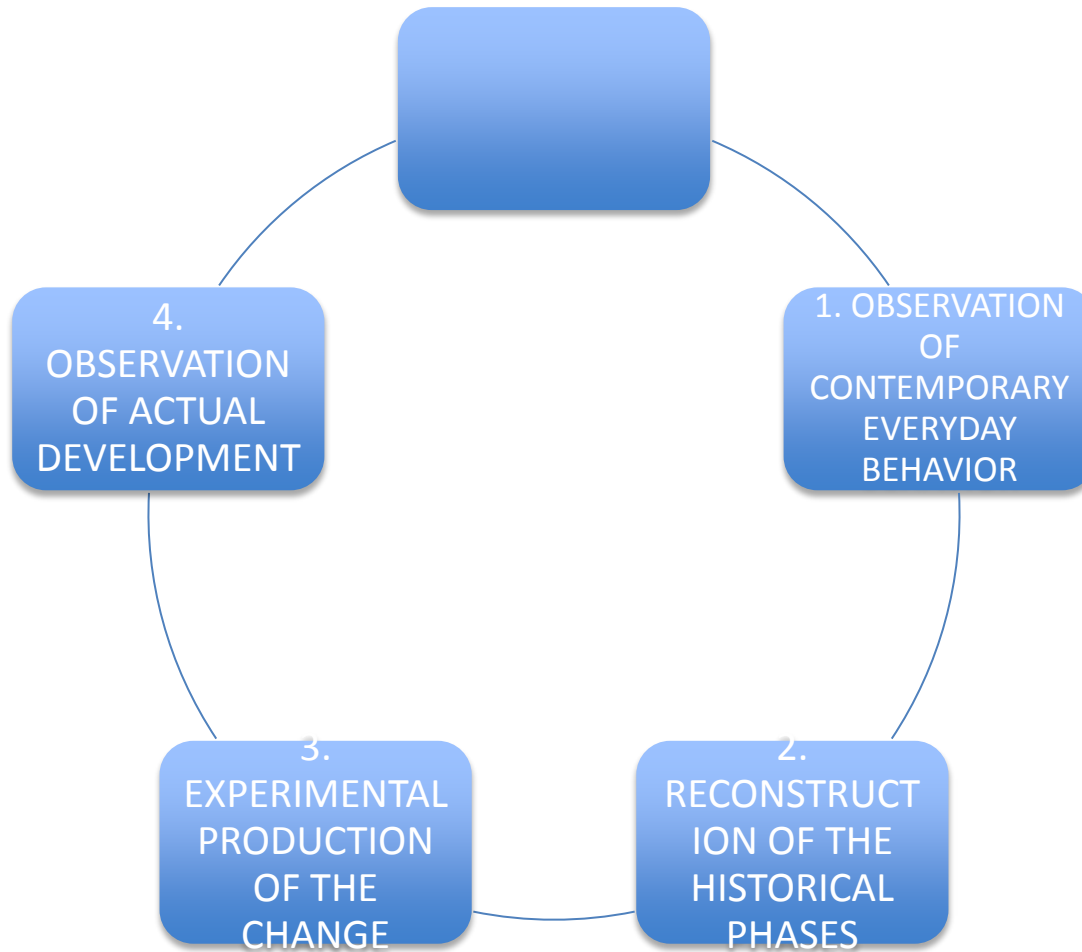
Basic assumptions & claims

- Work teams and individuals may not comprehend the dynamics of development in working life and are not able to define the real problems of their work (A simple interview doesn't reveal real problems)
- DWR and developmental tools can help to better understanding and results
- Work teams participate in projects developing better work processes (e.g. eliminating contradictions, creating new cooperation etc.)

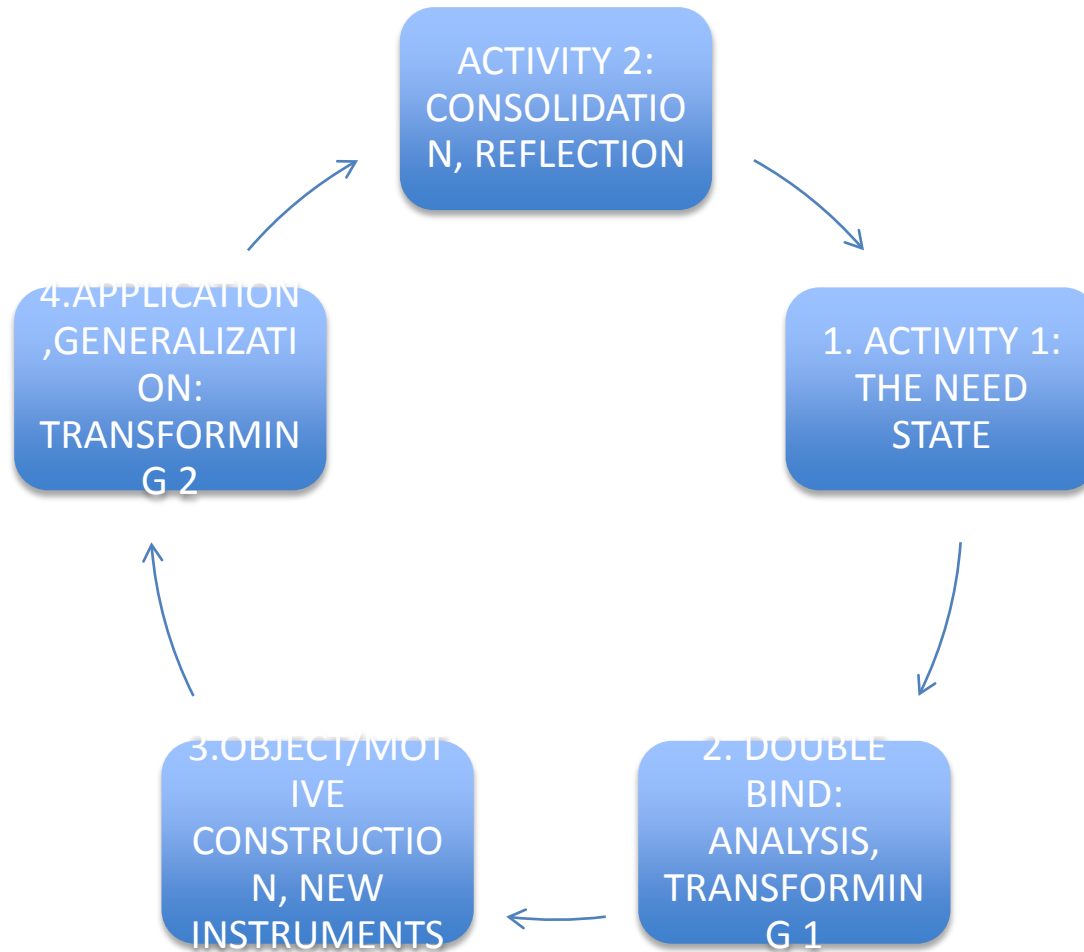
Basic assumptions & claims

- Tools: 1. Historical analyses of revealing dynamics of development, 2. General developmental cycle, 3. Activity system networks, 4. Contradictions
- Historical analyses
 - Historical changes of the object of work
 - Historical contradictions of theories
 - Contradictions of the present work practice

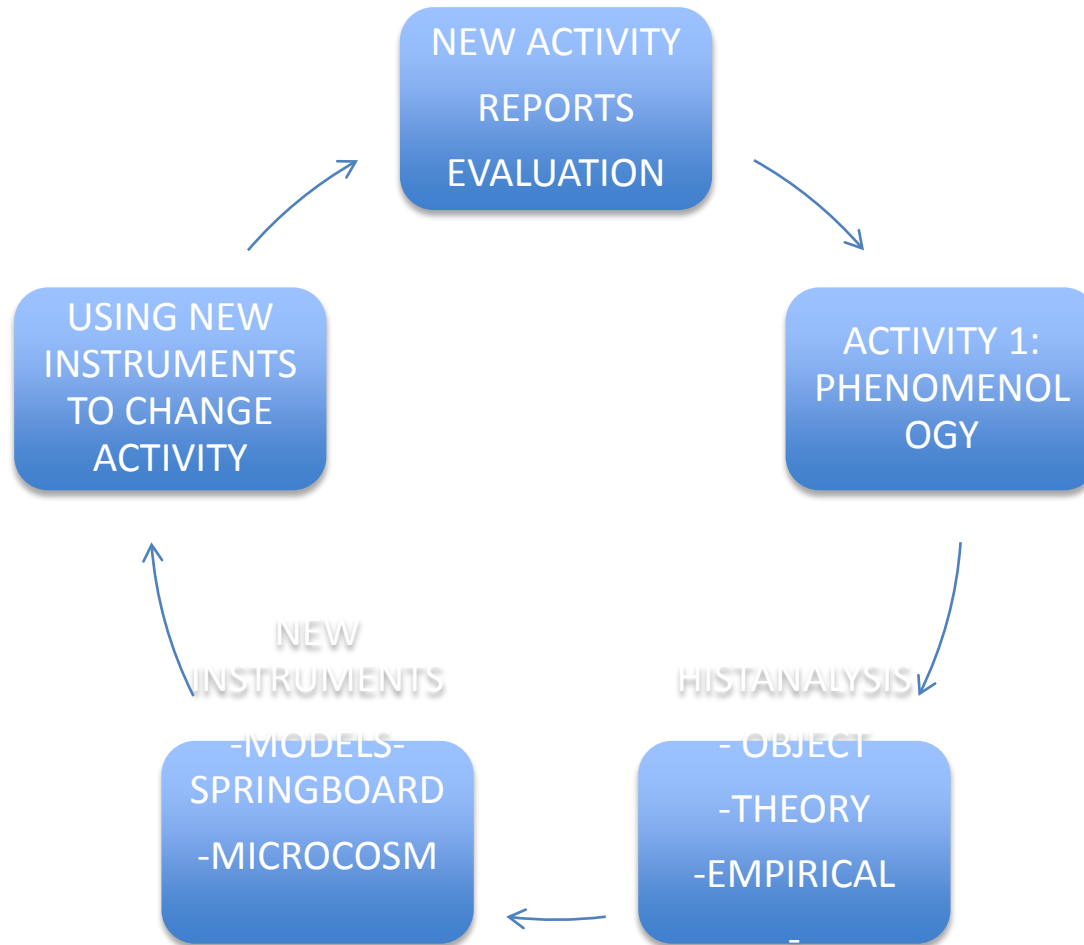
VYGOTSKY'S METHODOLOGY (SCRIBNER 1985)



The cycle of expansive transition



Expansive developmental research



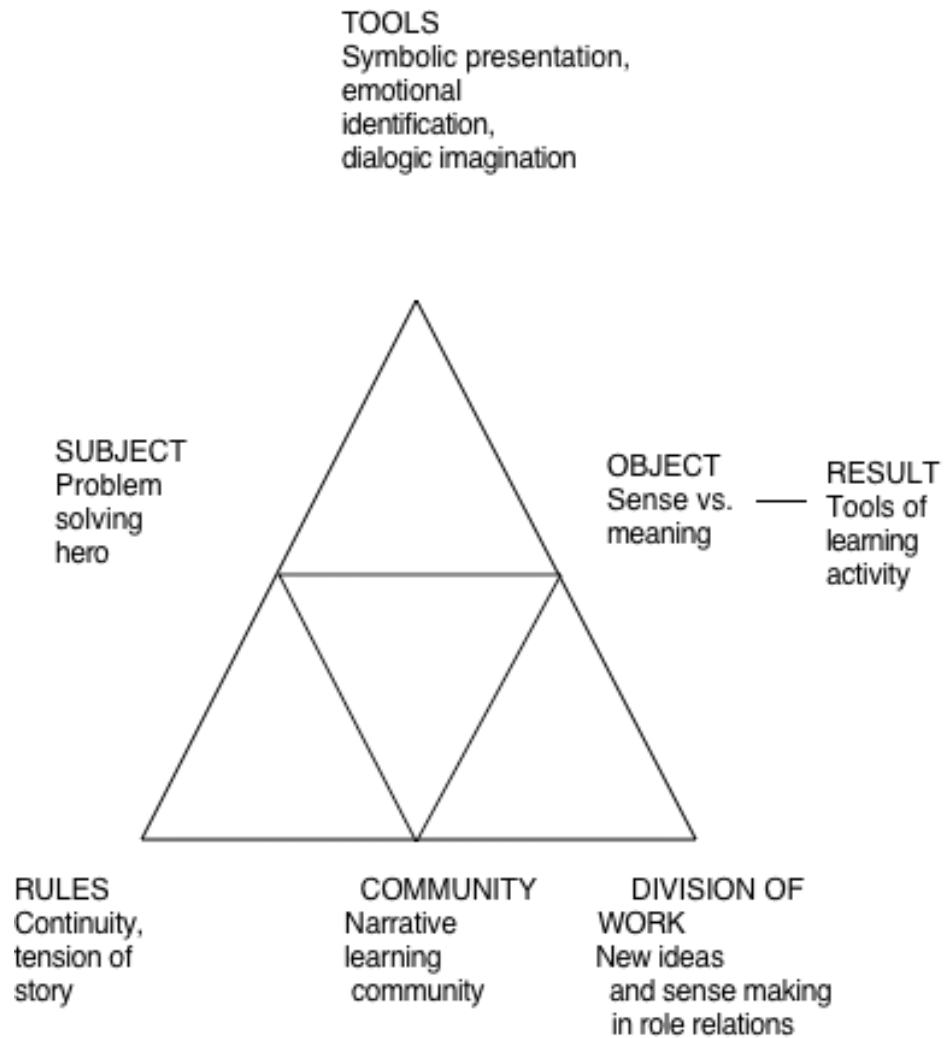


Figure 5: The structure of narrative learning