



Laurillard's diagram of 12 activities for teaching and learning.

It is redrawn with the numbers modified from fig.II.1, p.103, in  
 Laurillard, D. (1993) **Rethinking university teaching:**  
 A framework for the effective use of educational technology  
 (Routledge: London).

## Laurillard's 12 mathemagenic activities

### Conceptual description

1. Teacher describes the conception.
2. Student re-expresses the conception.
3. Teacher redescribes the conception in the light of the student's expression or action.
4. Student redescribes the conception in the light of the teacher's redescription.

### Personal experience / action

5. Teacher sets task goal.
6. Student acts to achieve the task goal.
7. Teacher's world gives feedback on the action.
8. Student modifies actions in the light of feedback.

### Reflection: (linking description and experience)

9. Student reflects on action to modify description.
10. Student adapts action in light of concept.
11. Teacher adapts task goal in light of student's description.
12. Teacher reflects on action to modify description.