ZNL TransferZentrum für Neurowissenschaften und Lernen

Research for the educational practice

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Transfer Center for Neuroscience and Learning

- Neuroscience provides impulses for research on learning
- An interdisciplinary team transfers and creates knowledge about learning in order to improve the learning in and outside the educational system

People

At the start: founded in April 2004 with money for 5 full-time positions for 5 years

Part of Psychiatric hospital:
colleagues are medical doctors and researchers in the area of cognitive neuroscience

Currently: 40 staff (psychologists, educational scientists, biologists, sociologist, teacher)
No tenure positions, often part-time

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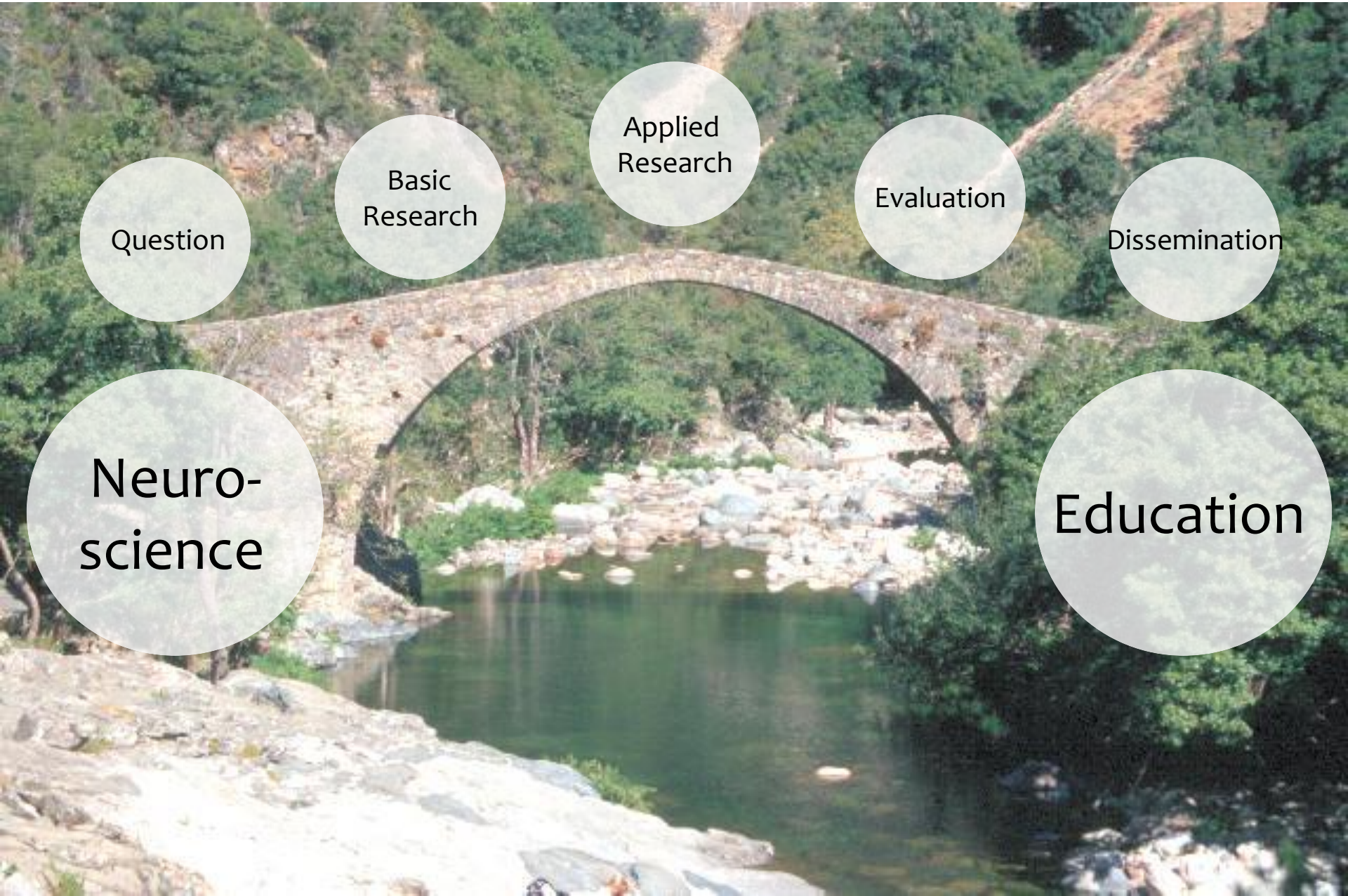
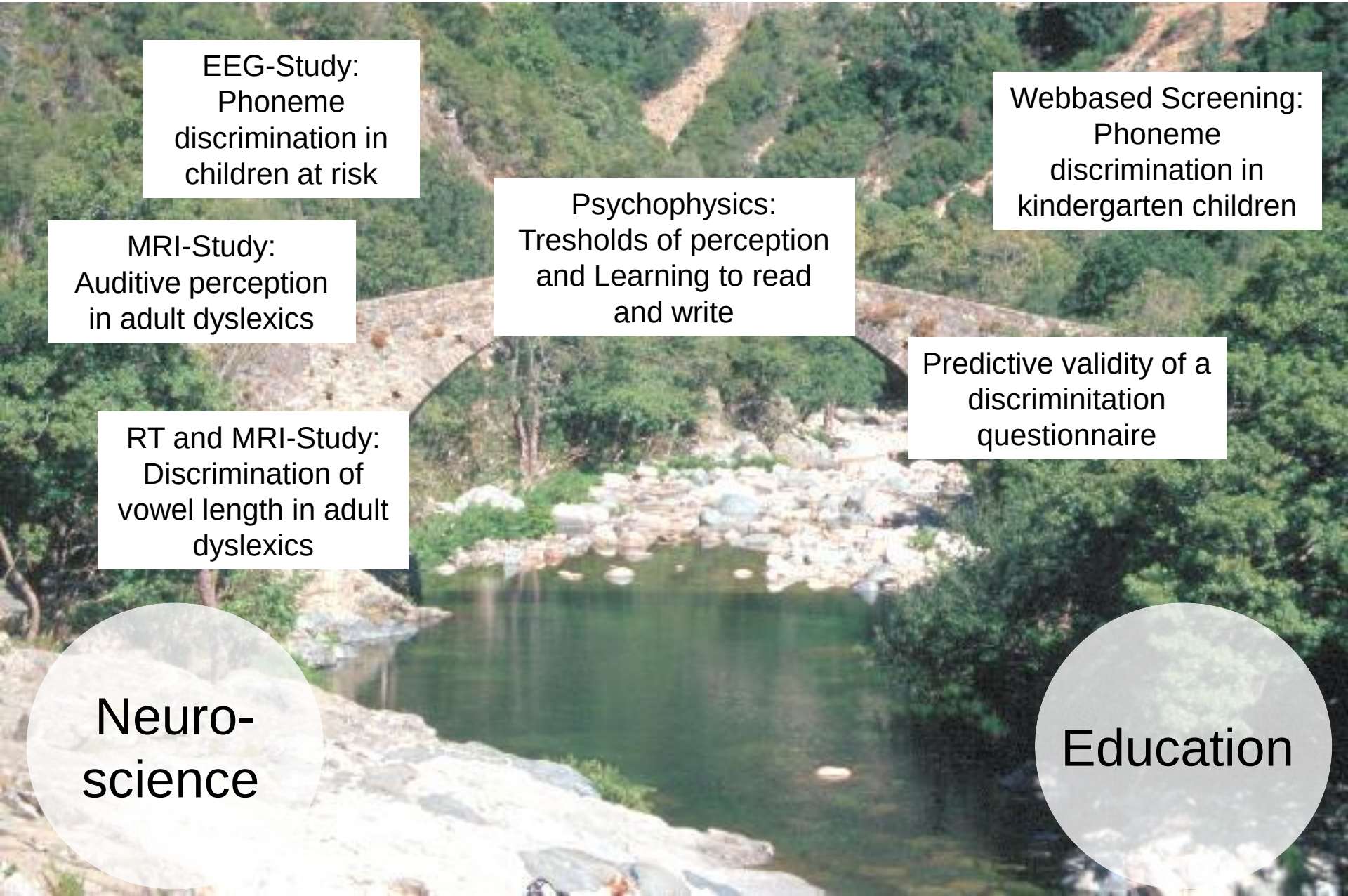
Transfer needs a special research approach

The special research approach

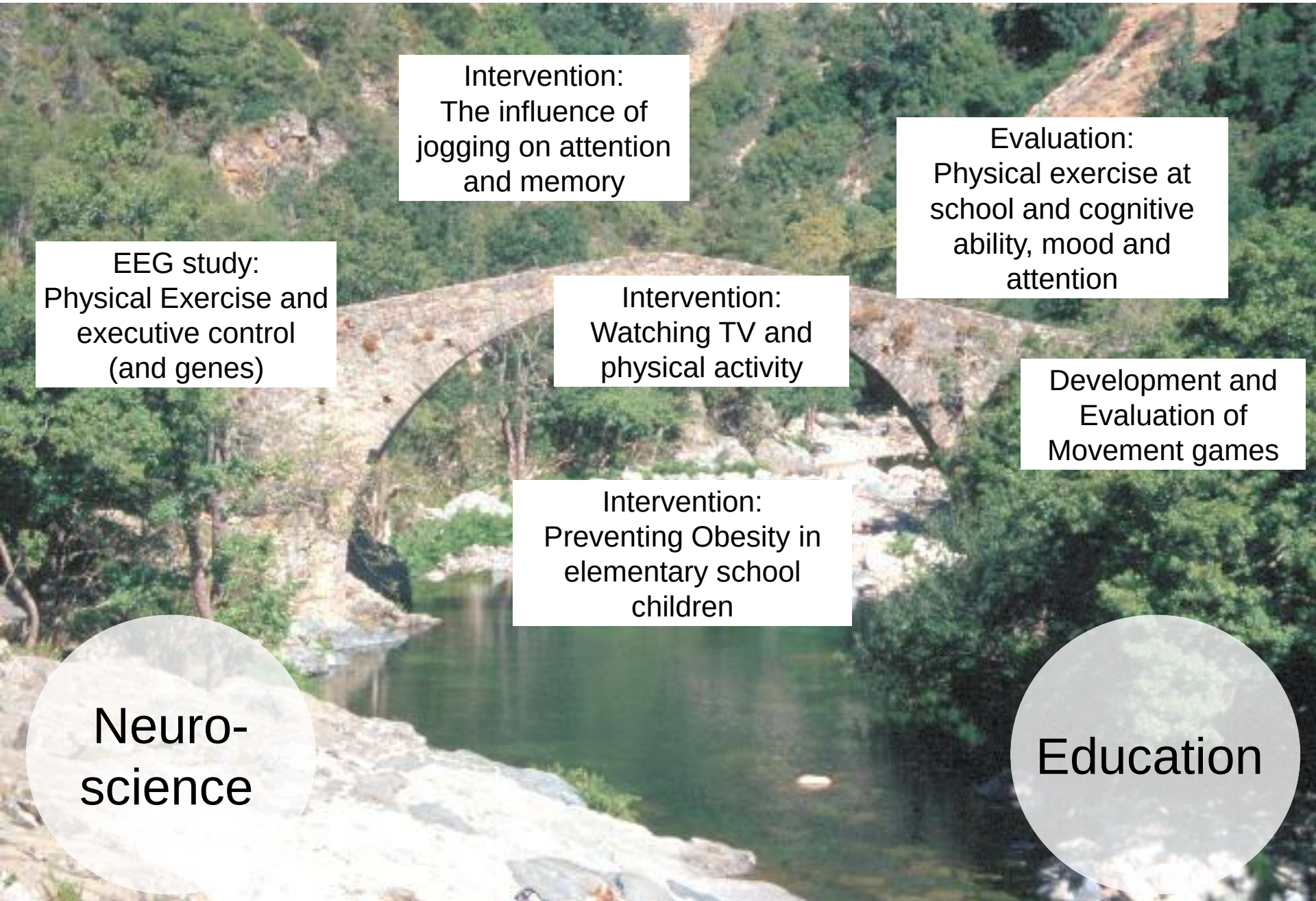
- Psychology as science that answers questions no one has asked …
- Science not for the sake of science but as service for practitioners in need
- Building bridges by doing translational research – from “bench-to-bedside”


Question
Basic Research
Applied Research
Evaluation
Dissemination
Neuro-science
Education

Auditive Perception & Learning to Read and Write



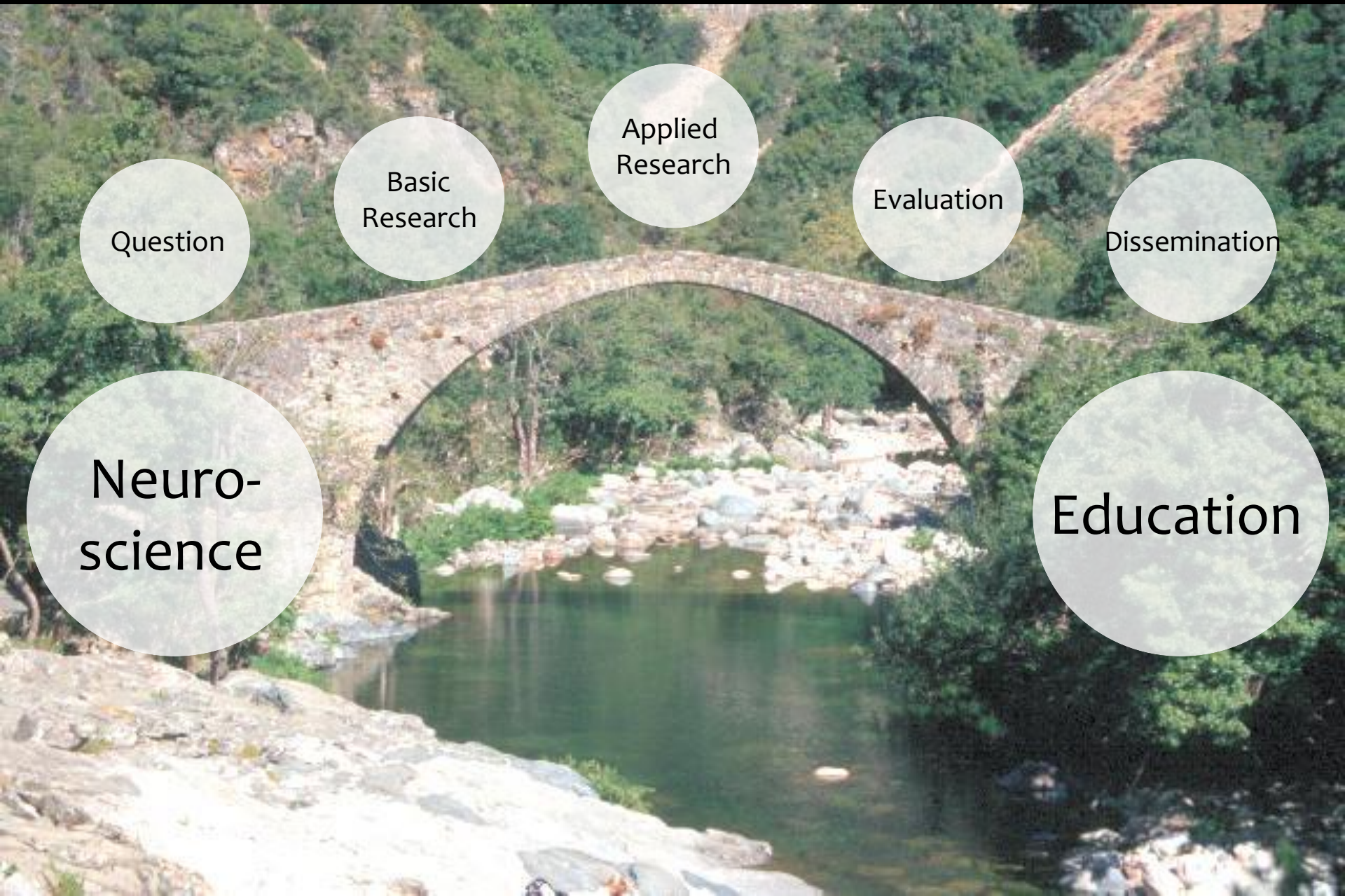
Physical Exercise and Learning



Special kind of researchers

Transfer needs a special kind of researchers

- Interdisciplinarity: appreciating the perspective of the other sciences
- Science as Service: Working on the problems of the real world in a system that almost punishes that research
- Teaming up specialists
  (people who know much about little)
  with generalists
  (people who know a little about much)
  to integrate findings and build bridges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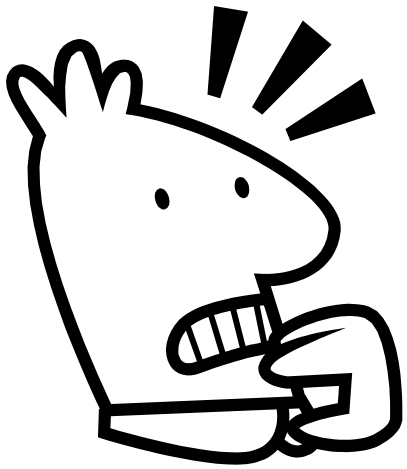
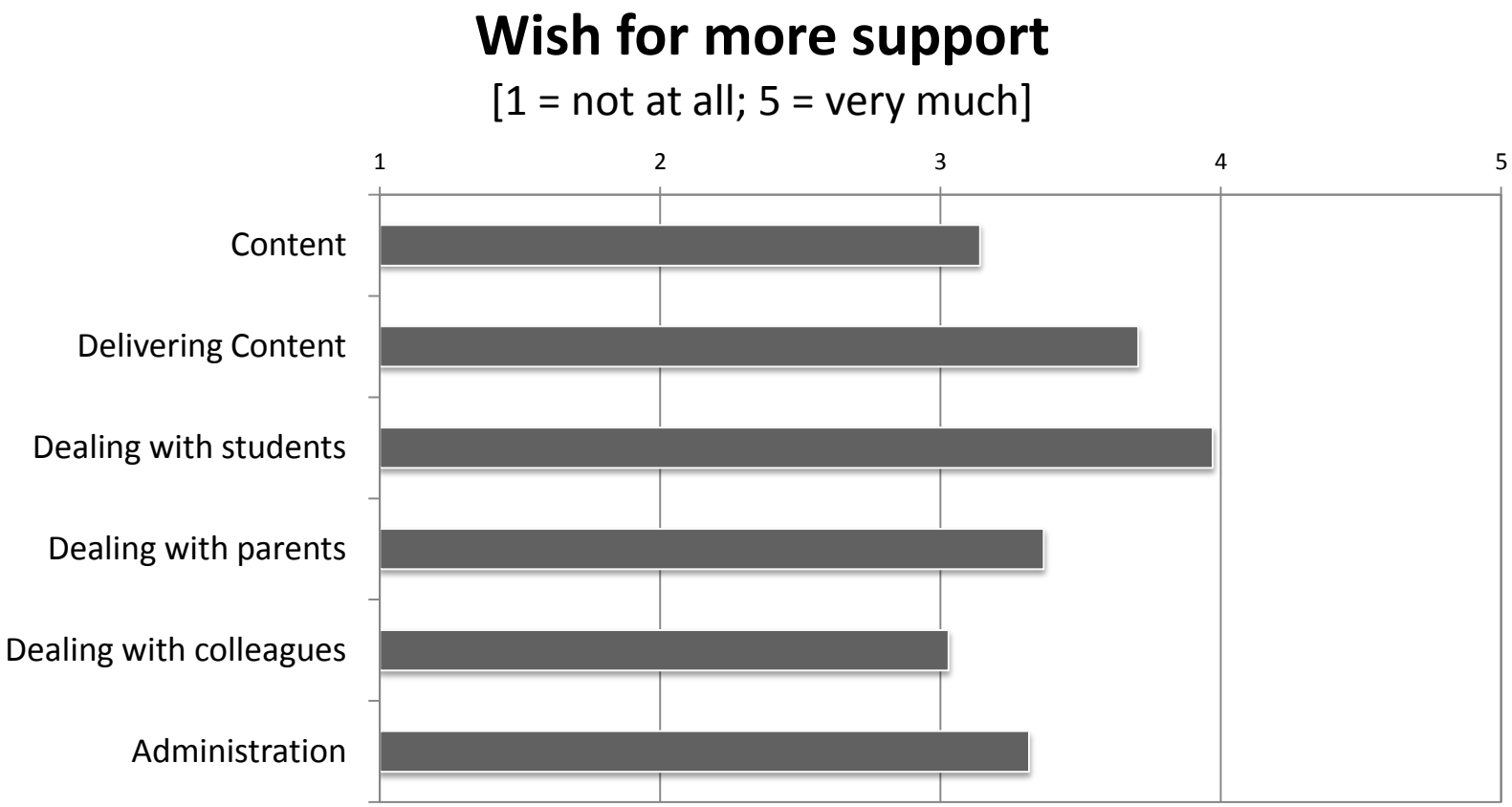
Bringing research into educational practice (for innovation)

If a fairy grants me a wish …



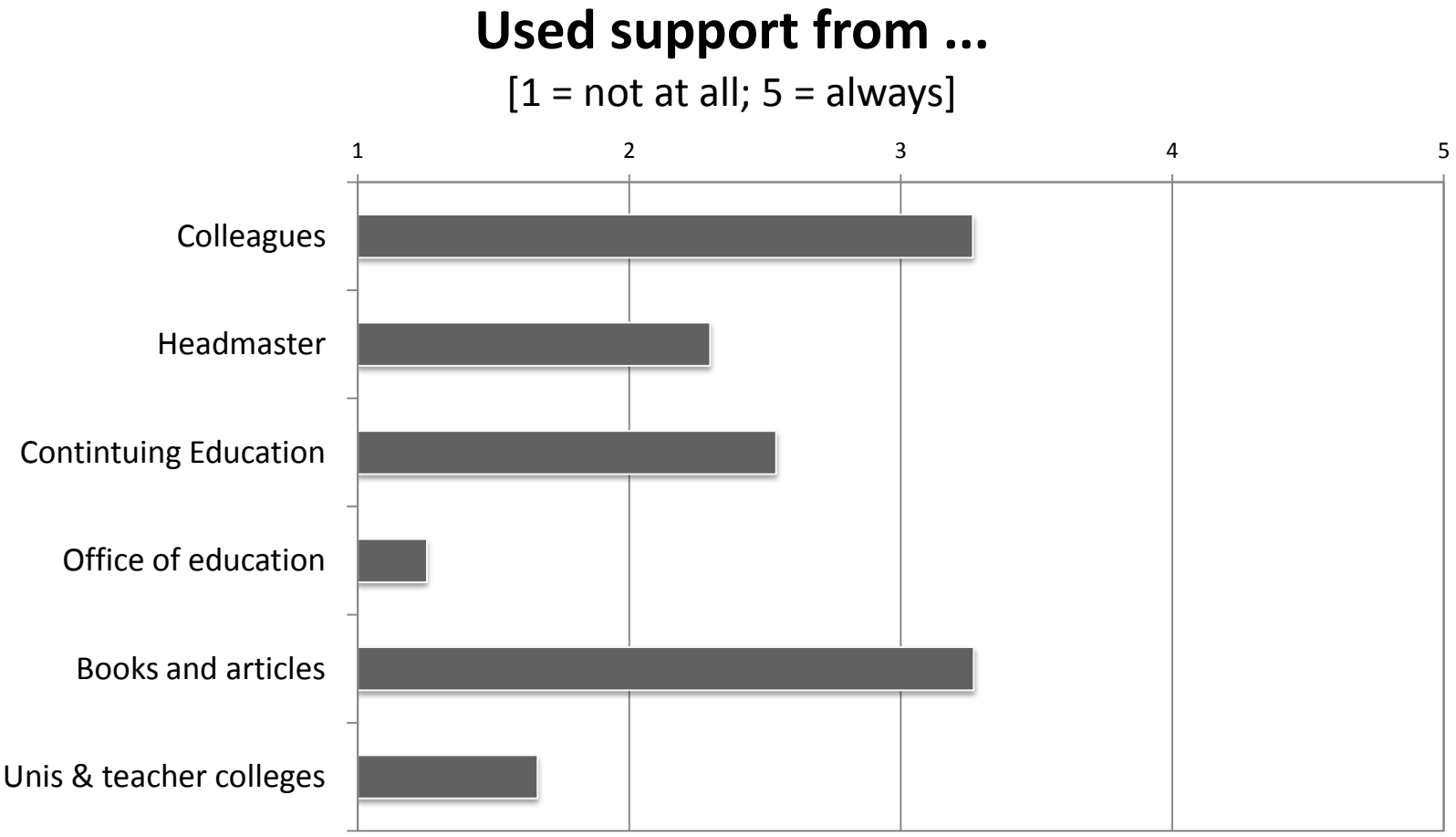
- Kevin doesn‘t do his homework, imposed sanctions don’t help
- Nikolai refuses to read out aloud and disturbs the class with foul language
- Volkan beats up the geeks on the schoolyard
- Abigail doesn’t care for prime numbers
- Emily declares: The teacher has never talked about the European province that was part of the test. Her parents want to see the headmaster.

Support for teachers



Hille & Christoph: Unterstützungssysteme für Lehrer, submitted

Support for teachers



Hille & Christoph: Unterstützungssysteme für Lehrer, submitted

Why is support from universities and teacher colleges not used?

- Never thought about this option
- Would not know where to turn to
- Are they competent enough?

  “People there lost contact with reality of school. Their experiences are decades old or they were never or only very briefly at school.
  They are so specialized that we cannot talk to them about complex problems: Some know about school books and what ought to be learnt but nothing about how children learn. Some are expert for content but don’t know about the students of a certain age. Some know children only from books and brief school visits.”

Hille & Christoph: Unterstützungssysteme für Lehrer, submitted

Where do practitioners turn to?

- The medical system has general practitioners

- Hotels have receptionists and front desks

If the fairy grants me a wish for bringing research into educational practice

- Give teacher / schools access to similar kind of educational help desk people who
  - have a good grounding in school reality
  - know a lot about research of the diverse field associated with school and learning
  - are supported by research that is relevant for practice
- With the task to
  - Take ownership of the practitioners' problems
  - Provide information or organize additional help

Bedankt!