

Design Thinking for Learning Analytics

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&

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Simulations

Dashboards

Personalisation

Learning analytics is cool!

Gamification

Adaptive scenarios

Contextualization

Is learning analytics cool?

What data on learning is available?

Where does data come from?

What does the data tell us about learning?

Who controls the data and analytics?

Legal requirements from GDPR

Data must be functionally required

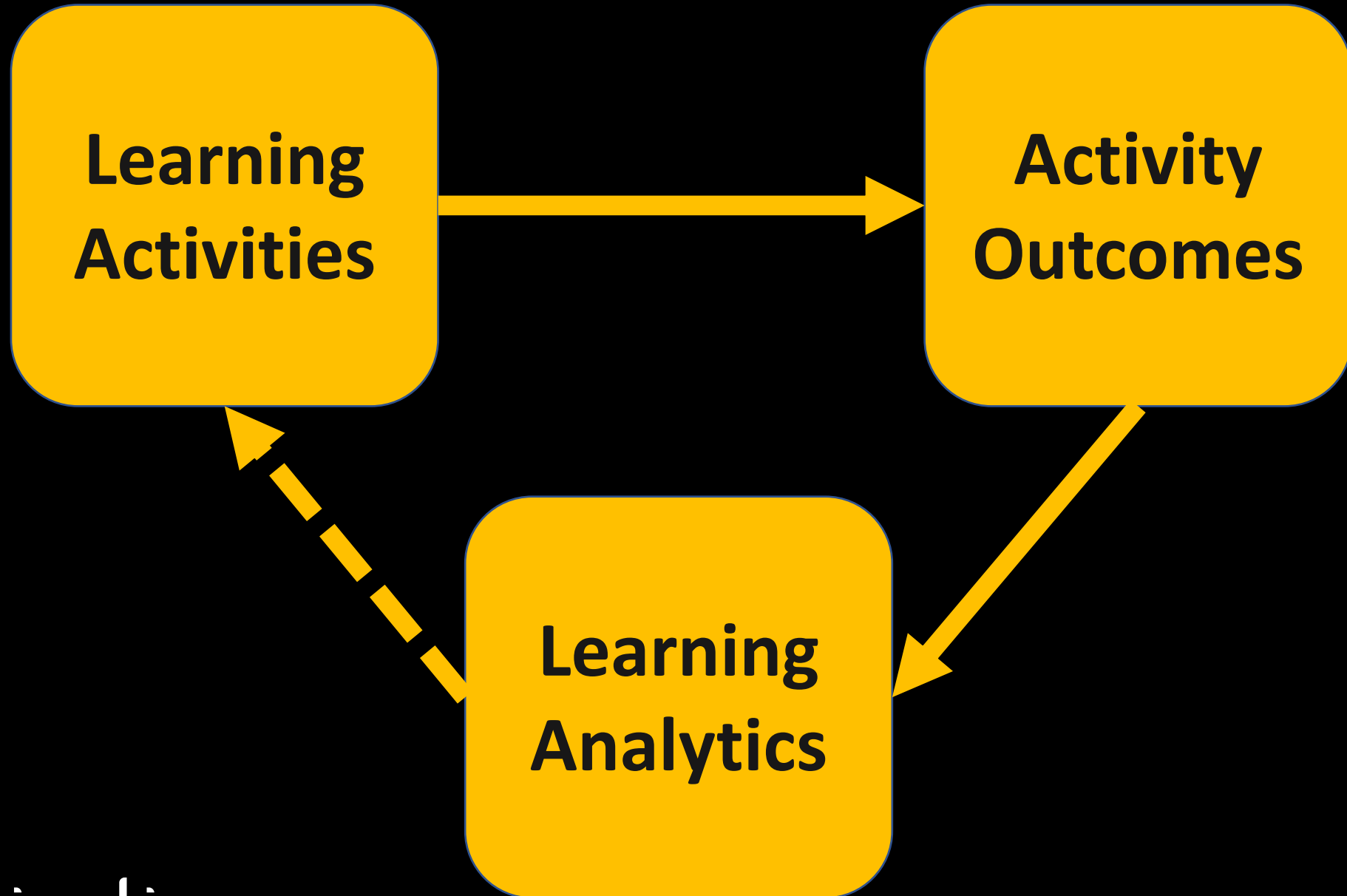
Data use must be transparent

Collected data must fit the purpose

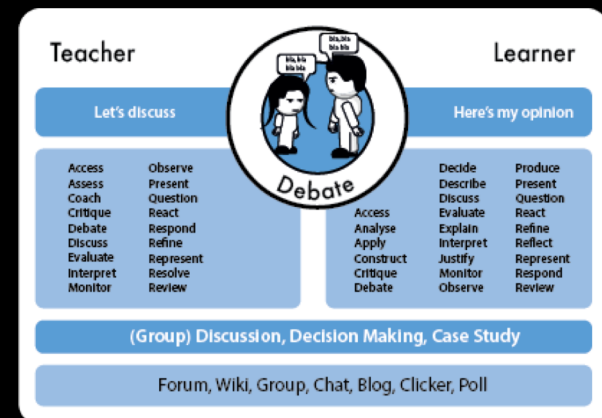
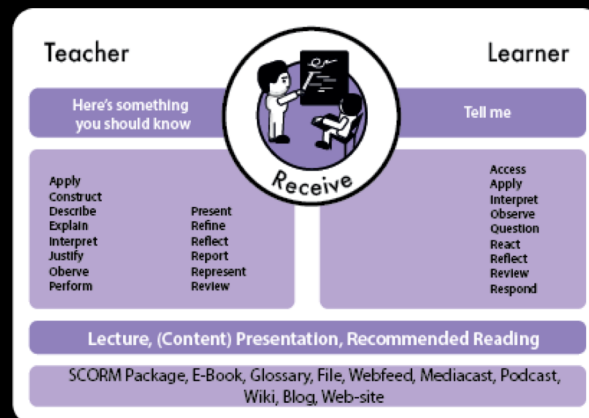
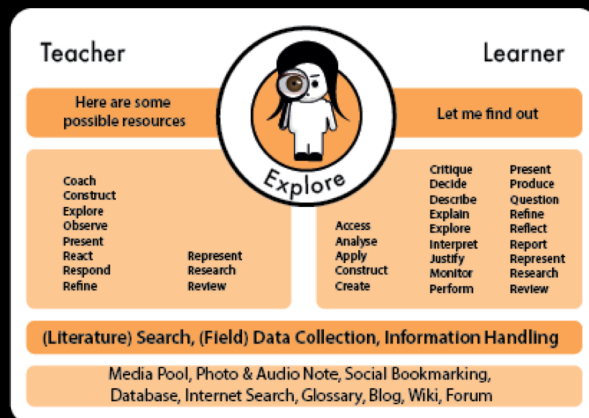
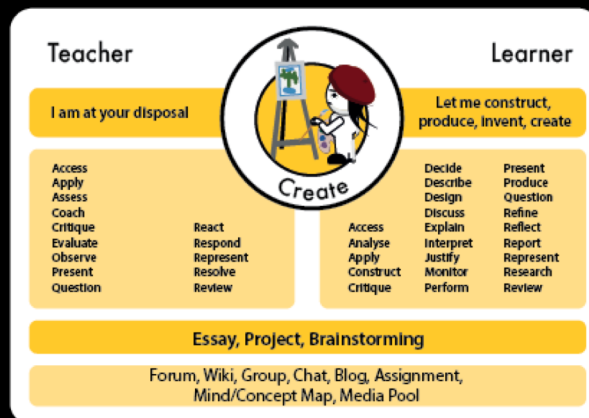
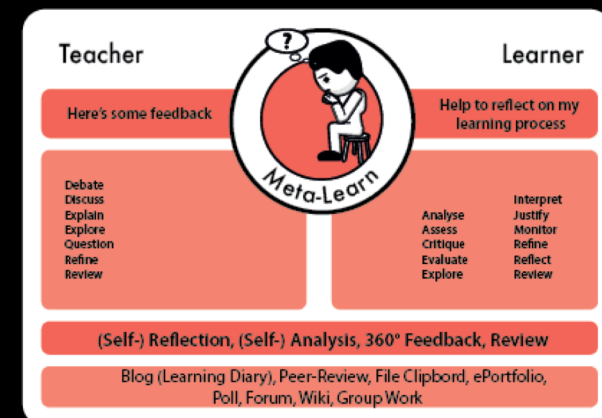
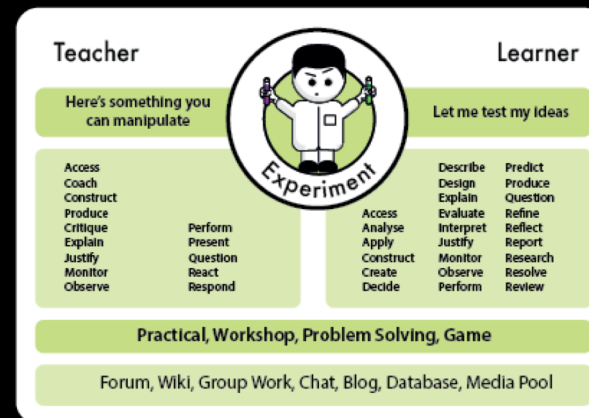
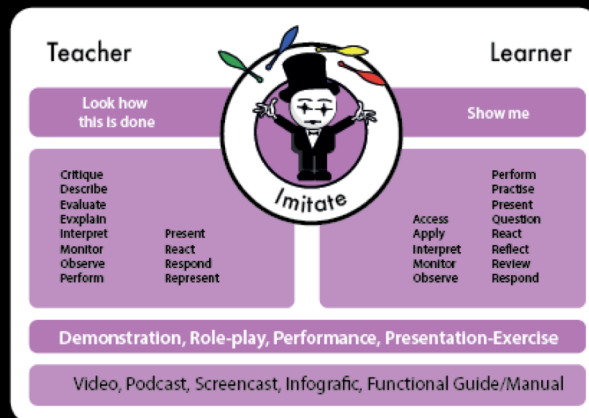
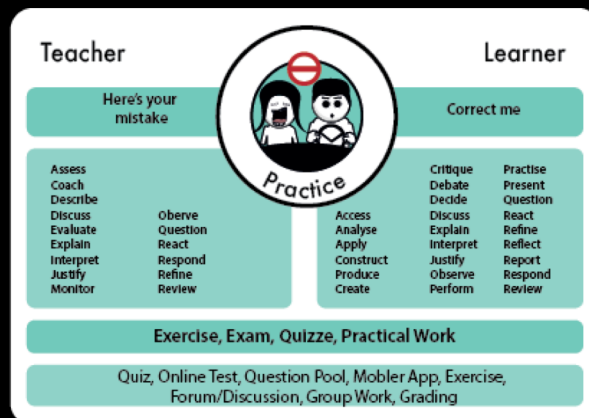
Learning analytics
can feel
overregulated and scary

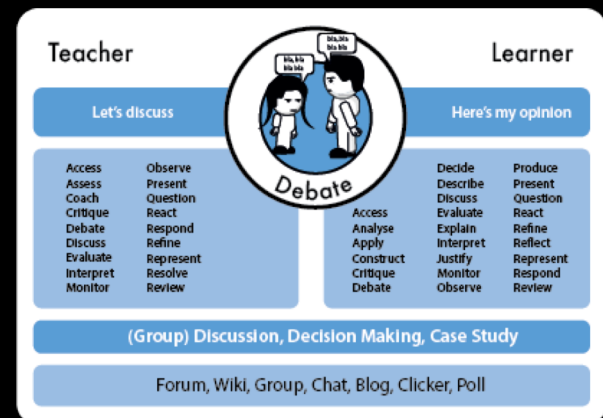
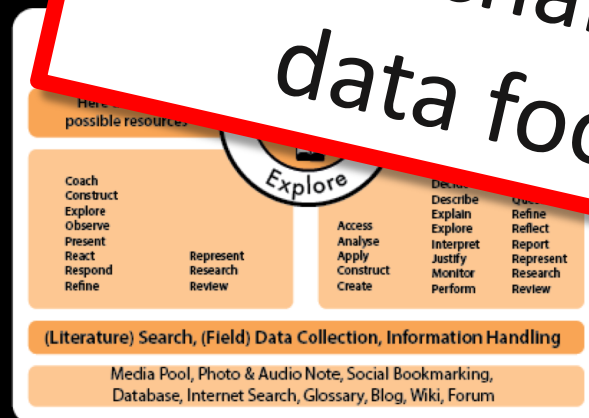
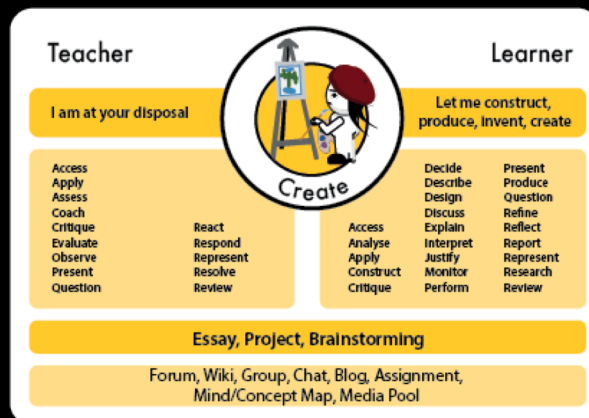
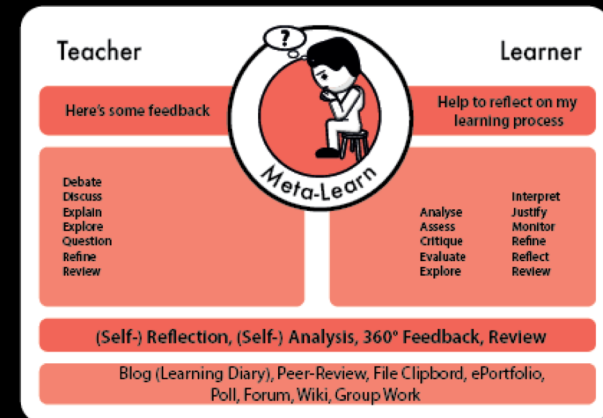
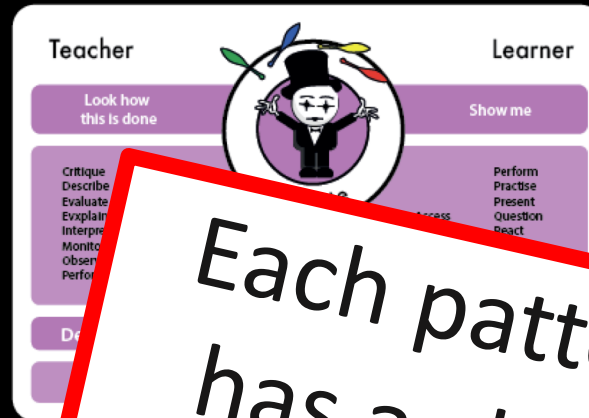
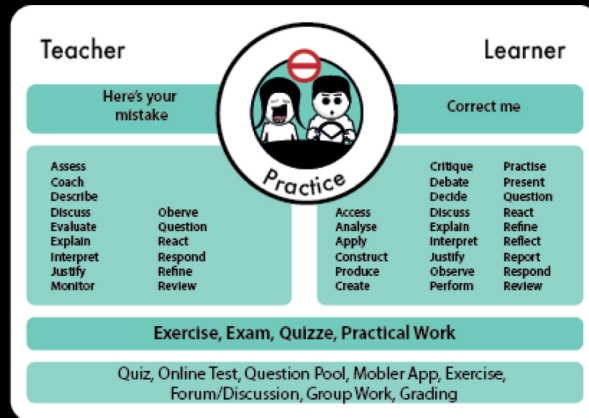
You can't get nothing out
that you didn't put in!

Learning analytics is tightly coupled to Learning Design



How do
learning designs
influence
learning analytics?





Each pattern activity has a characteristic data footprint

Teacher

Learner



Here are some
possible resources

Let me find out

Coach
Construct
Explore
Observe
Present
React
Respond
Refine

Represent
Research
Review

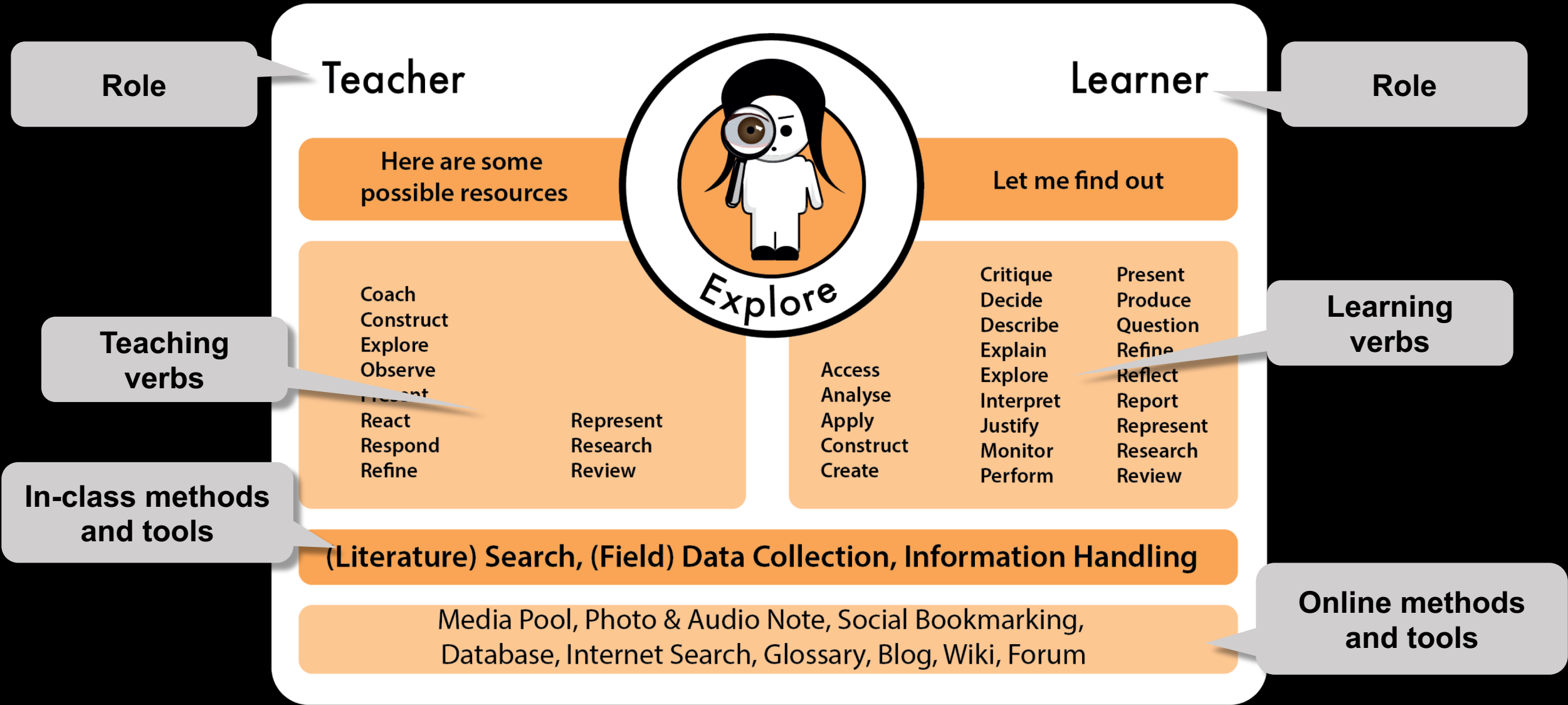
Access
Analyse
Apply
Construct
Create

Critique
Decide
Describe
Explain
Explore
Interpret
Justify
Monitor
Perform

Present
Produce
Question
Refine
Reflect
Report
Represent
Research
Review

(Literature) Search, (Field) Data Collection, Information Handling

Media Pool, Photo & Audio Note, Social Bookmarking,
Database, Internet Search, Glossary, Blog, Wiki, Forum



Learning objective

Learning task

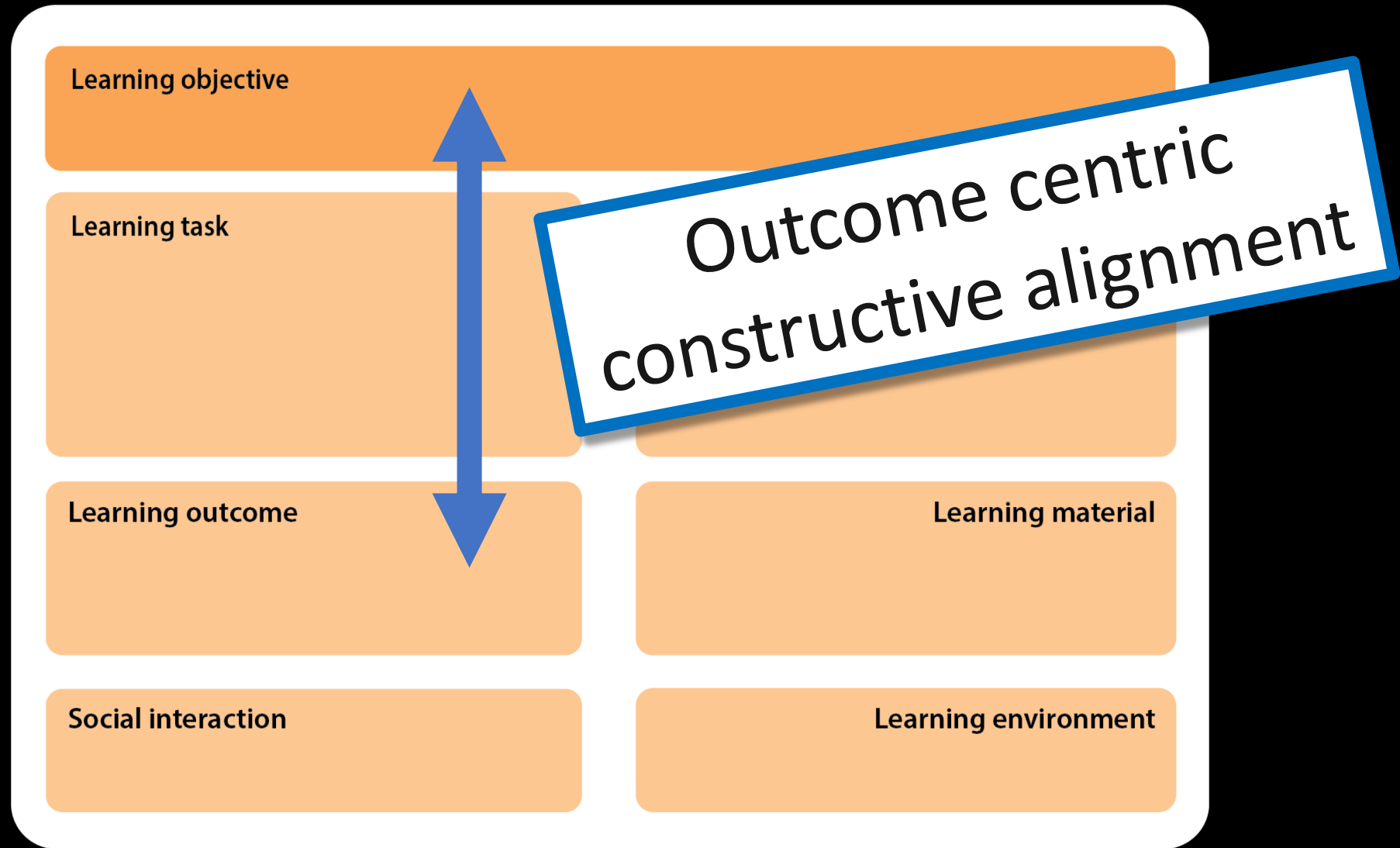
Support

Learning outcome

Learning material

Social interaction

Learning environment



Data that is characteristic
for generating learning
outcomes through activities

Product /
Knowledge

Experience /
Skill

Learning objective

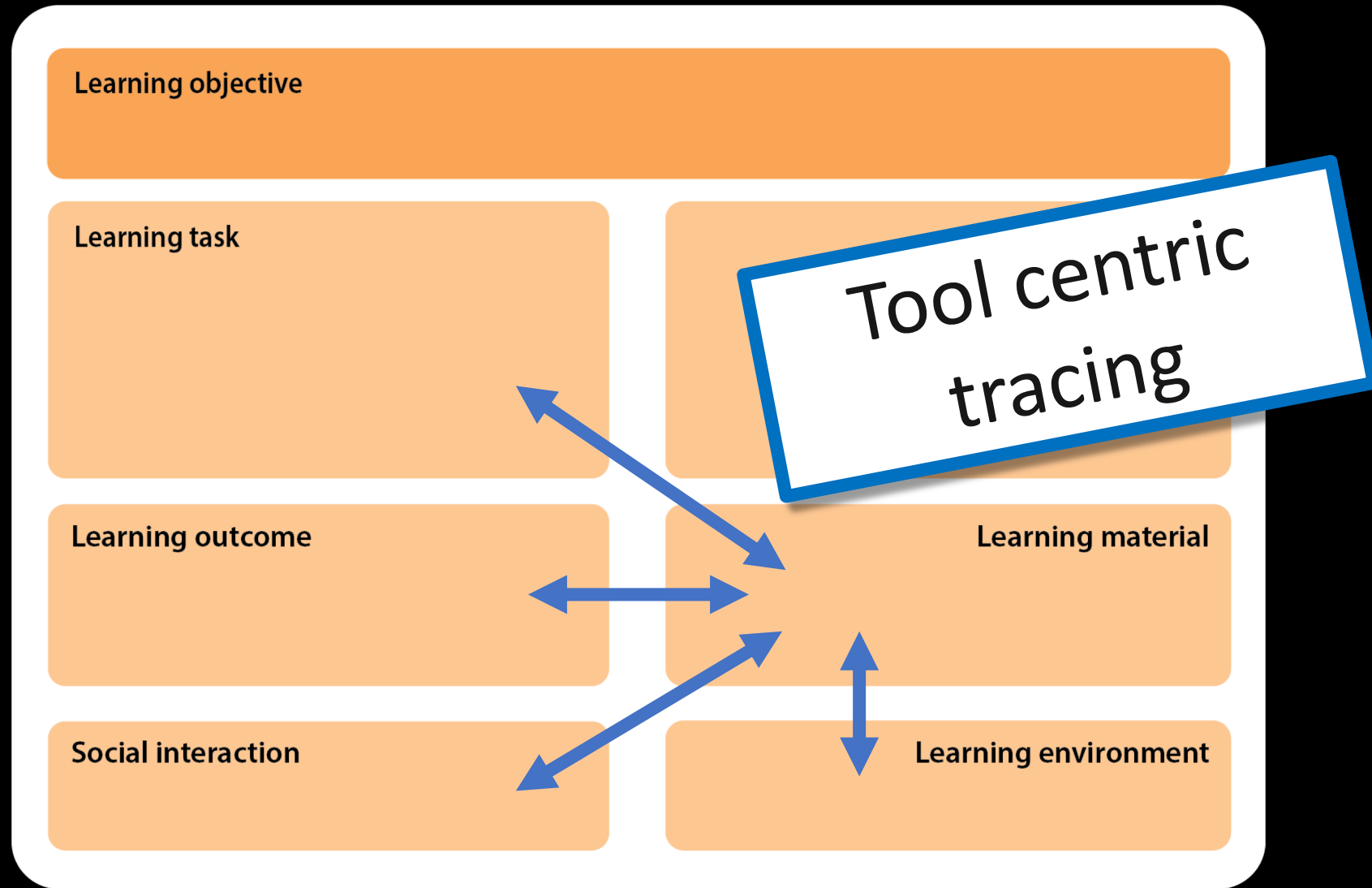
Learning task

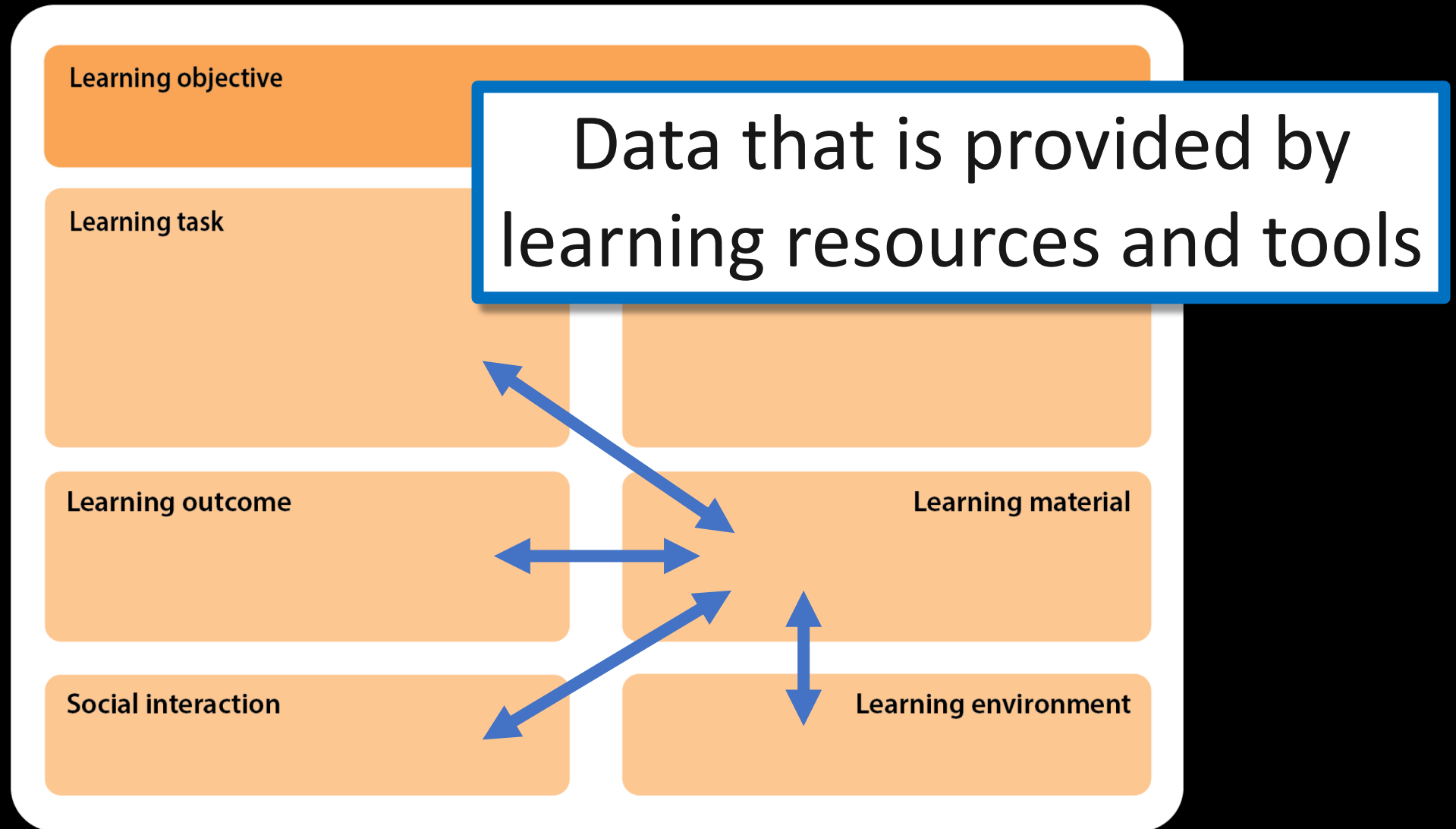
Learning outcome

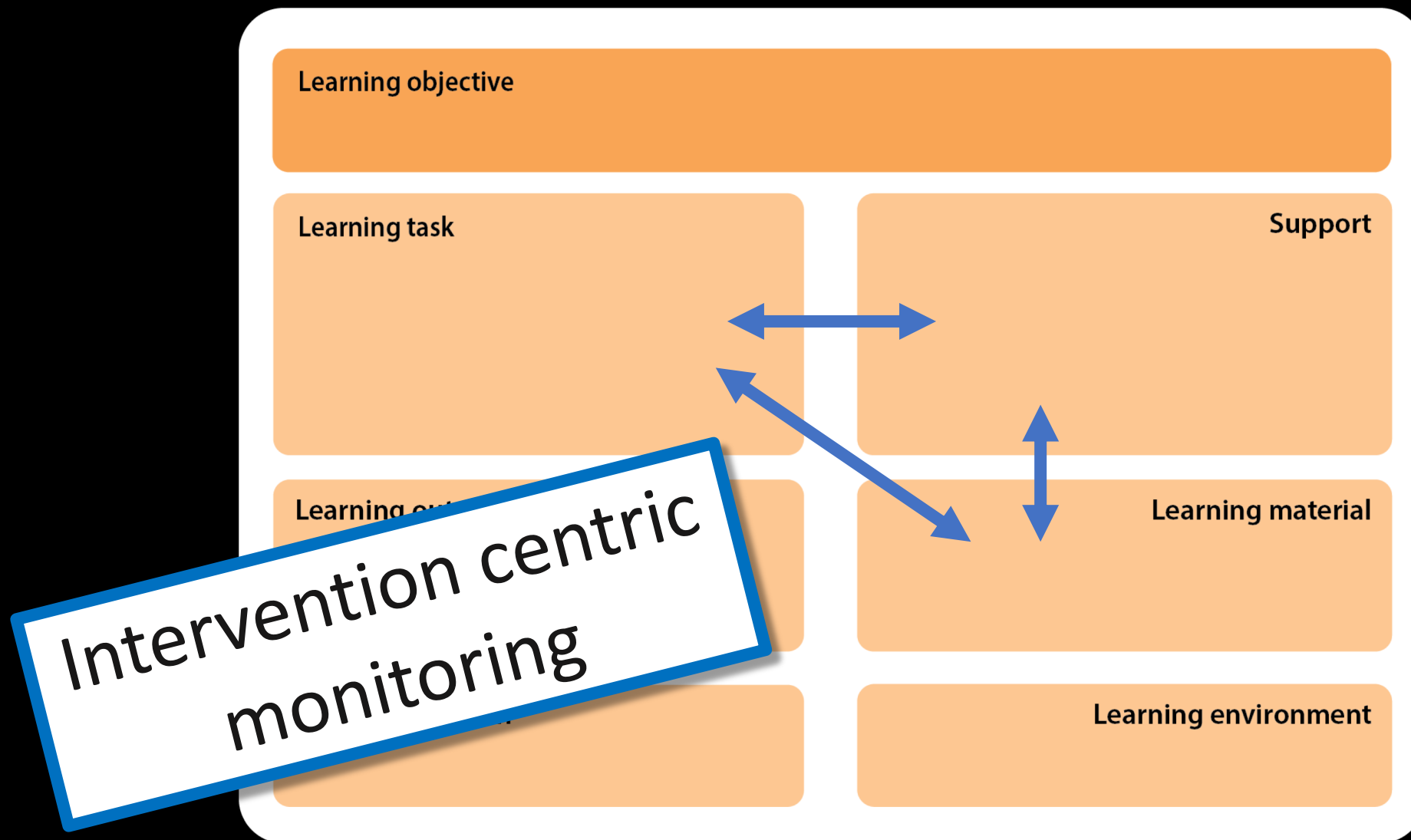
Social interaction

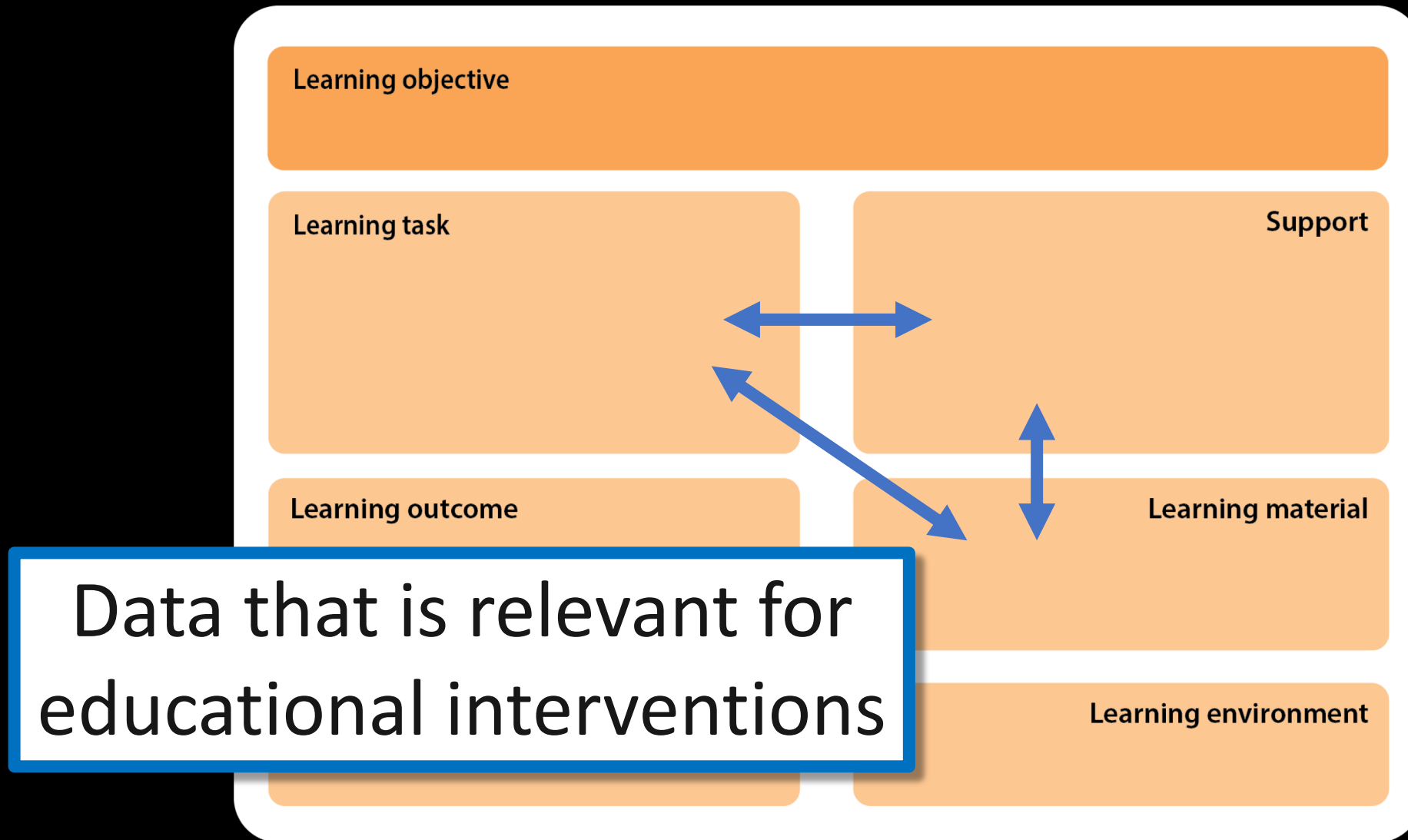
Learning material

Learning environment

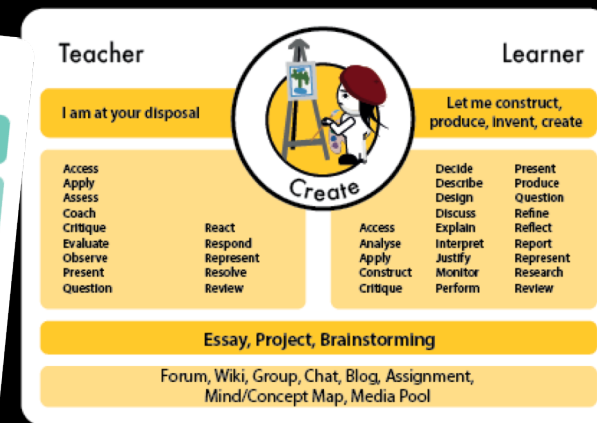
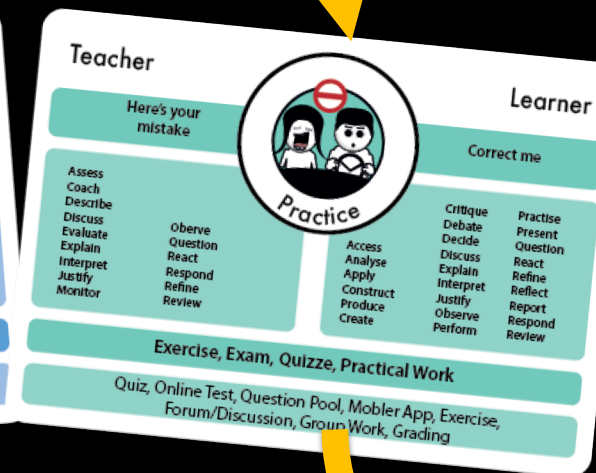
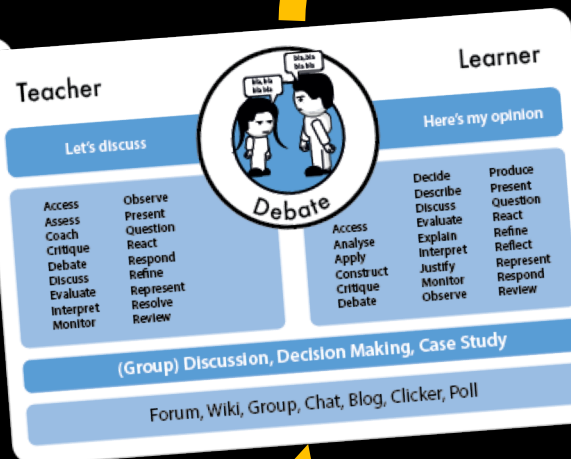
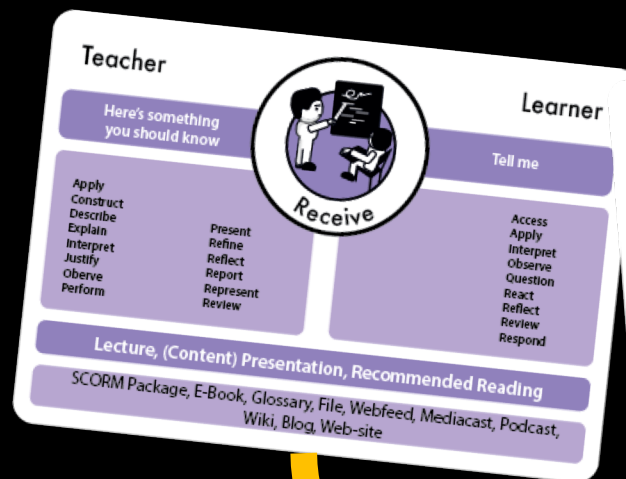








Process centric orchestration



Data that informs completion and activation rules of learning activities

