



Caine Learning Center

The Three Elements Expanded

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The three essential elements of teaching to engage natural learning emerge out of combinations of the 12 brain/mind learning principles.

1. Relaxed alertness: All learning is impacted by the state of mind of the learner and the atmosphere in a learning environment. The systems principles of natural learning suggest that the optimal state of mind and atmosphere are what we call *relaxed alertness*. It consists of a combination of high challenge and high expectations with low threat in the learning community as a whole; and a state of mind that combines confidence, competence and intrinsic motivation.

When in this state of mind, students are ready and able to respond to appropriate exposure to the subject matter of the curriculum by asking questions that personally engage them, and so the perception/action dynamic is usefully engaged.

The core foundation for developing *relaxed alertness* is an orderly (but not rigid) and caring community in which healthy relationships based on respectful and coherent procedures are infused throughout.

2. Orchestrated immersion in adequate experience: The only way to simultaneously engage the many processes and capacities reflected in the system principles of natural learning is through complex experience. That is because life experience is the context within which the perception/action dynamic operates.

The way to translate this into education is to *orchestrate the immersion of learners in experiences* in which content standards are embedded. More specifically, students need opportunities to do such things as:

- Physically interact with what is to be learned or understood.
- Make associations or have opportunities to recognize how what is being experienced links to what they already know.
- Frame their own actor (learner) centered adaptive questions.
- Research the world of formal knowledge, which includes what experts know about the students' questions.
- Be where those who are more expert in the subject matter can be imitated and where they can participate in natural conversations about the subject matter.
- Pick up concepts and procedures by osmosis, simply by being in places where the subject matter is being lived, just as people pick up much of their culture and first language.
- Create products or perform in ways that call for the use of vocabulary, concepts and skills tied to real world standards.
- Receive feedback on their work.
- Use the new knowledge in spontaneous situations.

3. Active processing of experience:

Although experience is essential, students do not automatically learn all that they need to learn just by being immersed in experience. The key is for the teacher to move away from providing information to assuring that students have many opportunities to receive feedback, digest, think about, question, examine and process what they are experiencing guided by teachers and the questions asked by teachers and others. This continuous and personal engagement by students is what we mean by active processing. *Active processing*, therefore, constantly shapes the perception/action dynamic and ensures that cycles are constantly completed and reinvigorated.

Active processing should include, where appropriate:

- Detailed sensory observation;
- Deliberate practice and rehearsal;
- Making links to previous learning;
- Multiple modes of questioning;
- Incorporation of expert knowledge;
- Analysis of data and sources;
- Ongoing reflection on feedback; and
- Expansion of capacities for self-discipline and self-regulation.

Active processing is doubly useful because it simultaneously provides feedback for both teachers and students while it can be used to expand and deepen student thinking. As Fullan and his colleagues point out (2006), the timing of feedback and the timing of responses to feedback is critical. In this way formative and summative assessment are largely integrated.

These three elements and their components do not need to occur in a linear or sequential fashion. Rather, they should be seen as a triple helix, with each element supporting and being a part of the other two.

In this way the perception/action dynamic is engaged, all of the capacities spelt out by the principles of natural learning find a voice, and the outcome is the continuous growth of real world competence.

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References

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