Klir’s Definitions of Terminology for

Combining Disciplines

Many people use terms such as interdisciplinary, multidisciplinary, and transdisciplinary as though they were synonyms, but George Klir considers three distinct concepts of how to combine disciplines and uses different terminology for each. The following gives an idea of his way of using the terms:

**Interdisciplinary:** Fields on the border of two (or rarely more than two) disciplines. Examples: biochemistry, astrophysics, social anthropology, psycholinguistics.

**Multidisciplinary:** Fields (typically applications-oriented fields) where experts in a variety of disciplines can work together to solve problems. Examples: robotics, sustainable communities, energy systems, rural medicine.

**Transdisciplinary (or cross-disciplinary):** Fields of such a fundamental nature that they are useful in all or nearly all other fields. Examples: applied mathematics, systems science.