

Examples of the Academic Language of Science

Vocabulary

General academic vocabulary

- *analysis, research, evidence, taxonomy, investigate*

Multiple meaning vocabulary

- *class, order, element, plate, table, work, system*

Technical vocabulary

- *inertia, alveoli, hypothesis, osmosis*

Symbols and abbreviations

- *H₂O, mL*

Word families

- *vertebra, vertebrate, invertebrate*

Greek and Roman roots and affixes

- *hypothesis, heterotroph*

Grammatical Structures

Passive verbs and impersonal expressions

- *Experiments were conducted ...*
- *We can deduce ...*

Omission of relative pronouns

- *Light passed through a prism changes ...*

Hypothetical sentences

- *If the ..., then ...*

Long noun phrases and nominalizations

- *government energy conservation project*
- *Growing a new plant from a part of another plant is ...*

Multiple embedded clauses and phrases

- *That is why greenhouses are made of materials that allow radiant energy to pass through them.*

Examples of the Academic Language of Science (contd.)

Language Functions and Discourse Structures

Functions

- hypothesize, generalize, compare/contrast, explain, describe, define, justify, sequence, evaluate, show cause/effect or problem/solution

Discourse Markers

- *because, since, so, therefore, for this reason, as a result, consequently* (causal)
- *first/second/third ..., initially, to start with, next, then, finally, previously, afterwards, at last* (sequential)
- *although, in spite of, however, on the other hand* (contrastive)
- *for example, such as, like* (examples)

Organization

- introductory features
- transition
- organizational signals
- foregrounding or backgrounding information

Cohesion

- reference
- substitution
- ellipsis
- conjunction
- verb tense sequencing

Genres

- procedure (providing instructions for experimental activities)
- procedural recount (recording what has been done in an experiment)
- science report (organizing information about science, e.g., taxonomies, steps, descriptions)
- science explanation (describing how and why phenomena occur, showing interactions rather than sequence of events)