

EXERCISE 4.2 Gap fill

The next two excerpts are taken from different introductions, and each contains an example Stage III. Fill in each blank space with an appropriate signal word.

A. THE EFFECT OF MICROCOMPUTER-ASSISTED
INSTRUCTION ON THE
COMPUTER LITERACY OF FIFTH GRADE STUDENTS

...Thus, the research literature suggests that computer assisted instruction (CAI) is somewhat more effective than conventional instruction in promoting student achievement, improving student attitudes, and decreasing the amount of time needed for instruction. _____, there is very _____ research that reveals how CAI affects students' knowledge or feelings about computers.

B. SOME CHEMICAL EFFECTS IN FATIGUE
CRACKING OF VULCANIZED RUBBER

. . . A recent study (1) of the failure of rubber strips due to repeated stretching has indicated that the process is caused by gradual tearing. The tear begins as a small flaw and then gradually increases until catastrophic failure occurs. This simple theory is remarkably successful in predicting the fatigue life of strips of soft vulcanized rubber (1,2). _____ there is some evidence that chemical processes may also contribute to rubber fatigue, there is _____ literature available concerning this possibility.

EXERCISE 4.3 Identification/Arrangement

The following sentences are taken from an introduction to a research report in the field of environmental engineering. Identify the stage that each sentence represents (from 1 to IV), and then number the sentences in the order you believe the authors used when they wrote the report. You may find more than one sentence for each stage.

UPGRADING LAGOON EFFLUENTS WITH ROCK FILTERS

- a. _____ Very simply, a rock filter consists of a submerged bed of rocks through which the lagoon effluent is passed horizontally (1)
- b. _____ However, previous research on rock filters has not fully identified the basic algal removal mechanism or developed a rational design method based on this mechanism.
- c. _____ Aerobic stabilization lagoons are commonly employed by small cities and isolated industrial plants for waste water treatment.
- d. _____ The objective of this project was to confirm that sedimentation is the primary removal mechanism operating within rock filters.
- e. _____ To remove algae from lagoon effluents, a variety of techniques has been proposed including micro-straining (2) and chemical coagulation and sedimentation (9).
- f. _____ An additional promising alternative for the removal of algae from lagoon effluents is the rock filter. (6, 7, 8, 11, 12)

EXERCISE 4.4 Transformation

Rewrite each of the Stage IV statements given here, changing the orientation from *research* to *report*, or vice versa. Make any necessary changes in word choice and verb tense.

- 1. This thesis develops and explains a « digital computer simulation capable of accompanying both symmetrical and asymmetrical mutual coupling between parallel circuits.
- 2. The aim of this investigation was to study the groundwater conditions in the closed Animas Basin to aid in evaluating the hydrologic conditions of the area.
- 3. The experiment to be described below was an attempt to provide some further data on the role and position of a summary in a research report, using natural materials.
- 4. The purpose of this research was to further investigate and characterize the Sanitary Engineering Research Laboratory reactor system.
- 5. This paper will discuss some demographic factors which might be important for queen rearing in African honeybee colonies.

EXERCISE 4.6 Gap fill Exercise

Fill in an appropriate modal auxiliary in each blank space in the following Stage IV and V statements.

1. The study reported here was made to determine whether solar space-heating and domestic hot-water systems for single-family residences _____ be economically competitive with conventional gas systems.
2. The study reported here examined patterns of health-care use. It attempted to determine if public health education programs for lower socioeconomic level consumers _____ result in increased use of the service.
3. The purpose of this study was to learn more about the food buying practices of university student wives so that areas of weakness or lack of knowledge _____ be exposed to those who are responsible for planning course work and programs in consumer education.
4. This report compiles the history of locally owned retail clothing stores in the Southwest. The perspectives of the successes and failures in this retail sector _____ be of use to those who are considering entering the market in this area.