d. Statistical Methods
   Description and rationale for the statistical techniques used for data reduction and analysis.

e. Findings
   Verbal and tabular presentation of results of the data analysis, generally refraining from interpretations.

f. Discussion and Conclusions
   Reaching of a judgment as to whether the hypothesis is supported or refuted. There may be a discussion of how the findings: (a) are consistent or inconsistent with the findings of previous hypothesis tests; (b) support, extend, specify, or undermine the theory from which the hypothesis was deduced; (c) suggest one or more new theories or explanations that may account for the findings; and/or (d) suggest the need for more research, and if so, of what type.

g. Significance
   Discussion of the relevance and practical benefits of the findings and conclusions to clinicians, administrators, policymakers, members of the general public, or other possible audiences besides researchers.

2. COST/BENEFIT OR COST-EFFECTIVENESS STUDY
   a. Alternatives
   b. Accounting perspective
   c. Identification of benefits and costs, including direct/indirect, tangible/intangible, programmatic, opportunity, etc.
   d. Measurement of the above
   e. Valuation of benefits and costs
   f. Discounting
   g. Consideration of equity
   h. Decision criteria
   i. Choice
   j. Treatment of uncertainty
   Typical title: “A Cost-Effectiveness Study of a New Child Care Facility at the Westinghouse Plant in Maryland”

A formal cost-benefit analysis is the evaluation of a program, project, treatment, or other course of action in terms of the relationship between its costs or the resources it consumes, and the outputs or benefits it produces. These costs and benefits are typically translated into dollar values. This allows for the comparison and ranking of alternatives on the basis of economic efficiency criteria. Such an analysis may be prospective: undertaken before an investment decision is made, based on estimates of anticipated costs and benefits, and thus useful in making future decisions about resource allocation. Or the analysis may be retrospective: undertaken after a program has been implemented, based on empirical data on actual program operations and impacts, and thus useful as a type of impact evaluation.

Cost-effectiveness analysis is used for comparing the productivity of alternative courses of
action having similar objectives. In this approach, costs and benefits are quantified in commensurable terms, but only the costs are assigned monetary values. Benefits are expressed in terms of efficacy in correcting a given problem or reaching specified goals. This allows for the comparison and ranking of alternatives in terms of their costs of reaching given goals, or in terms of their costs for different levels of goal achievement. The assumptions and procedures for measuring costs in this approach are the same as those used in cost-benefit analyses. Among the elements of cost-benefit and cost-effectiveness analyses may be the following:

a. Alternatives
   Specification of competing uses of resources, alternative approaches to a problem, and the courses of action to be analyzed. There should be a precise description of any differences among the alternatives in terms of scope, size, limits, location, and design characteristics, that may lead to differences in costs and benefits. Alternatives may be specified as combinations or packages.

b. Accounting Perspective
   Specification of a reference point to serve as the basis for identifying, measuring, and monetizing costs and benefits. The major perspectives that may be considered are those of: (a) individual program participants or service recipients, (b) the public or private funding source, and (c) society as a whole. Separate calculations may be carried out for various affected subgroups.

c. Identification of Costs and Benefits
   A catalog and description of each type of cost and benefit associated with the alternatives. These may include direct and indirect, tangible and intangible, and intended and unintended costs and benefits. Costs will include program costs, net opportunity costs, and existing benefits that are reduced by the alternative. Benefits may represent a desirable change in present conditions or the maintenance of conditions that would deteriorate if the alternative under study is not chosen.

d. Measurement of Costs and Benefits
   Estimation for each alternative of the magnitude of each type of cost and benefit. This may entail the development and defense of a model which outlines the causal relationship between the characteristics of the alternatives and their costs and benefits.

e. Valuation of Costs and Benefits
   Expression of costs and benefits in monetary values. Tangible costs and benefits are generally measured by their market prices, but corrections (shadow prices) may need to be used to more accurately reflect true social values when there are sources of serious market price distortion. If indirect approaches are used to impute dollar values to program effects, there should be a defense of the underlying assumptions. Some intangibles may be better left out of the cost-benefit computations and either expressed in quantitative measures other than dollar values or simply described in qualitative terms.

f. Discounting
   Application of a rate of interest or discount to costs and benefits accruing in the future so that they are adjusted to present values. There is usually an articulation and defense of the assumptions that underlie the choice of discount rate, and the analysis may
valuate costs and benefits using several different rates. Alternatively, there may be a calculation of each alternative's internal rate of return (i.e., the benefits are discounted at whatever rate would set the present value of benefits equal to costs).

g. Consideration of Equity
Identification of who the losers and gainers are, discussion of the fairness of the resulting distributional effects, and making of adjustments by either (a) applying a system of “equity” weights to the costs and benefits affecting different groups, or (b) developing and applying equity criteria in conjunction with the efficiency criteria.

h. Decision Criterion
Description and defense of a summary measure or other rule to be used in choosing among the alternatives. In cost-benefit analyses, this may be the highest ratio of total benefits to total costs, or highest net present value (discounted benefits minus costs). In cost-effectiveness analyses, the search may be for: (a) the alternative which attains a particular goal or specified level of output at the lowest possible cost; or (b) the alternative which produces the most benefits or highest level of outputs at a given cost (or within a fixed budget).

i. Choice
Comparison and ranking of the alternatives in terms of the criterion chosen. This may include a discussion of how different decision criteria result in different rankings.

j. Treatment of Uncertainty
Investigation of how the ranking of the alternatives is affected when the problems of uncertainty are addressed by such techniques as contingency analysis or sensitivity analysis.

3. FEASIBILITY STUDY
   a. Assumptions
   b. Business history and future
   c. Demand for product or service
   d. Market
   e. Management
   f. Financial information, including supplies balance sheet, income statement, loan conditions, cash flow information, estimated sales, operating expenses, taxes, ROI, etc.
   g. Appendices, including product description, maps, land, appraisals, building estimates, sampling techniques, etc.
   Typical title: “Feasibility Study for establishing a Computer-Aided Design Firm”

The opportunity to develop a feasibility study and use it as a research strategy allows a student to focus on the myriad aspects of starting or enlarging a business. Writing a feasibility study for an entrepreneurial venture is no easy task. Since most business ventures require outside capital, the best way to approach the project is to prepare the feasibility study as though it will be presented to a lending institution, a bank or venture capital organization.

The successful feasibility study not only sells the concept to the lender with qualitative information, but must be convincing in its inclusion of quantitative details about every aspect of