

MURDOCH UNIVERSITY

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ASSIGNMENT ATTACHMENT

Student's C...

DATE
IN | OUT

10/3 | 28/3

Students should fill in Sections A and C in BLOCK LETTERS and include this sheet each time an assignment is submitted.

MURDOCH UNIVERSITY
EXTERNAL STUDIES UNIT
15 MAR 1977
Date Received

SECTION A

Course Classroom Studies 461 Date Received 14 March

Assignment No. 1 Assignment Title Critique of Research Project

Student Mr/Mrs/Miss/Ms Pugh SURNAME D E INITIALS 7790786 STUDENT NO.

Tutor SCHIRECI NAME (BLOCK LETTERS)

SECTION B TUTOR'S COMMENTS

You've made some constructive criticisms and useful suggestions (especially at the end of your critique)

I disagree with your characterisation of method A as 'student-directed'. Sixth form classes seem to be teacher-directed; they differ in the amount of 'directiveness'

Assessment
3

Tutor's Signature
M Schireci

Date
25/3/77

Note to Tutor: When this section is completed, please return to External Studies Unit with assignment.

SECTION C

NAME Don Pugh
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Donald E. Pugh

Critique of Wankowski, J. A.
"Teaching Method and Academic
Success in Sixth Form and University"

Classroom Studies

School of Education/

TABLE OF CONTENTS:

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2. The Problem
3. Hypothesis
4. Selection of Subjects and Data Collection Techniques
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6. Observations
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9. Changes to Improve the Quality of Research.

INTRODUCTION:

In analyzing descriptive social research, Van Dalen (1973 p. 191) lists the following steps for conducting an investigation.

1. Examine and define a problematic situation.
2. State a hypothesis.
3. Select subjects and resource materials.
4. Select techniques for collecting data.
5. Establish categories to classify data.
6. Make discriminating objective observations.
7. Describe, analyze and interpret the findings.

J. A. Wankowski's article possesses a series of specific strengths and weaknesses in each of the above categories.

THE PROBLEM:

The problem of J. A. Wankowski's article appears to be that some instruction methods are more successful than others in permitting students to achieve in sixth form and in first year university. The purpose of his descriptive research is to study the relative effects of sixth form teacher-oriented versus student oriented instructional methods upon sixth form British students' success in writing final 'A' level leaving examinations.

The author goes on to apply his observations on instructional methods to university students adaptation in a new academic

*teacher
discussions?
all the
why
discussions
Student
nic ted?*

environment.

The author has failed to review any literature to justify his topic and has mismatched his problem statement, evident in his title, with the data he collected. The question posed as to the relationship of instructional method to examination success is a relevant and useful one. Yet no data is provided by the author to determine how the students, taught by different methods, have succeeded in university. Nor can the reader hazard a guess, based on the author's data, as to the students' future adaptation to university.

HYPOTHESIS:

Mr. Wankowski's hypothesis is nowhere explicitly stated. It is that students presently learning through teacher-oriented lessons designed for examination needs, may succeed in those exams, but the students, habituated to prescriptive instruction, may suffer maladjustment because of the independent study techniques demanded by the university.

The hypothesis is a valuable one because, if true, there is incentive to reduce the emphasis on exams in sixth form, both to reorient teaching methods to student-centered, and to increase student adaptation to university study methods.

The author's implication that students are unprepared for university techniques due to teacher-oriented lessons is never proven. Nor does he confirm his assumption that student-oriented lessons are in fact more effective in preparing students for university. In addition, sixth form students, taught some subjects by teacher-oriented lessons, are also taught other subjects in student-oriented lessons and would be familiar with skills presented in both methods of instruction.

SELECTION OF SUBJECTS AND DATA COLLECTION TECHNIQUES:

The author is commended for his random selection of 84 students, one in every three from a 15% random sample of the first year students of the University of Birmingham. Since each student possessed an equal probability of selection, variables in students' backgrounds, and bias are eliminated, strengthening the internal validity of the experiment. Furthermore the random sample of students came from a large number of schools stretched over a wide geographical area. This permits the study to have validity for a wide area, without being influenced by the teaching methods of any one single school.

The questions posed the students are valid ones which do not reveal the questioner's intentions or encourage biased

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word to
avoid in
contact

responses by the students.

The author's definitions also seem adequate. For instance, the definition of learning as survival is acceptable, as is the author's quotation of Erikson who argues that children rely on any learning method that currently works. There are, however, some weaknesses. Many assumptions concerning the nature of learning are made without documentary proof. The statement ~~that~~ "learning from others, rather than from books is the general pattern of education", (50) is unproven as is "students will learn in a style set by their teacher".(50) Deductive generalizations such as that university teaching lacks immediate feedback, are made, without an indication of any university teaching method surveys. Furthermore, it is an oversimplification to say that learning efficiency is caused "precisely" by immediate feedback, as learning efficiency is caused by many factors such as motivation. The author frequently omits to consider other variables. For instance, he states that a change in teaching methods on entranceⁿ to university leads to student disorientation, (51). No proof is provided that students do become disoriented, or that the change in teaching method is the precise cause of this disorientation. Many other variables such as difficult subject content are also conceivable. The assumption that previous attitudes to learning determine if the student becomes self-directed (51) is deterministic and overlooks such other variables as motivation. Nor can the

yes -
one or two
figures would
have illustrated
point

example of the students complaint of "too many books" (52) be taken as an example of unfamiliarity with studying. The complaint is a common one frequently made by post-graduate students who are familiar with study techniques.

DATA CATEGORIES:

The author's plan is to label a distinctive teaching method, student or teacher oriented, ^{to} ~~for~~ each 'A' level subject for each student. Student marks for each subject are then correlated with a teaching method. A subdivision between science and humanity subjects is added.

The author's decision to classify teaching methods as (A) two way communication or student-oriented teaching, or (B) one way communication or teacher-oriented teaching, is unscientific.[?] It is doubtful that any teacher utilizes only one method of teaching, yet all teachers are pigeon holed into one or the other category. Student error is probable from a recall which would emphasize instruction methods utilized in exciting or boring lessons while overlooking the general. Concrete data is needed which lists the number of lessons of either type to which the students have been exposed.

Wankowski's distinction between subjects as science or humanities is artificial in places. For instance geography is

his seems to be a useful distinction in study

classed as a science, but economics, which also uses the experimental method, is a humanity. Since the author's results depend heavily on his division between science and humanities, he ought to have justified his division to avoid an accusation of biased results.

OBSERVATIONS:

The author's initial observations indicate a lack of significant difference between grade levels of subjects and the corresponding teaching techniques. However by separating science subjects from humanity subjects, 70% of science passes were from teacher oriented tuition while 62% of humanities passes came from student-oriented teaching. Science grades were higher, however, when taught by student-oriented teaching.

ANALYSIS:

In his analysis of the data Wankowski (57) suggests that note dictation techniques do not lead to 'independent study techniques'. No data or social psychological research is provided to support this statement. The author also states strongly that many teachers, under pressure to maximize their exam pass rate, support the 'prevailing' method of teaching. This method is defined (55) as one which maximizes the success rate in exams and is shown by the author to be teacher oriented. (55) Here Wankowski's data and his definitions contradict each other. The data shows that higher science marks and more ~~humanity~~ ^{humanity} subject passes resulted

from student-oriented teaching.

A case of misplaced emphasis is apparent in the author's concentration on dictation as an indication of teacher-oriented instruction. A different slant on his data indicates that although one teacher in five used dictation, 80% do not. The other twenty probably did not use dictation all the time. On a similar vein (23% + 42%) 65% of the students had been exposed to some spontaneous note taking. (57) While the author uses his data to imply that many students are disoriented by university, the change in emphasis suggests that the majority should not be. Of course, the author's analysis rests on the acceptance that spontaneous note taking leads to improved independent study in university, an assumption which the author does not attempt to prove.

The analysis that many first year university students are disoriented because of teacher-oriented sixth form lessons also rests on the author's belief that university goals and methods of teaching are different than those of the high schools. Nowhere does the author specify university goals. Indeed, he characterizes university teaching as lacking in feedback; a situation which his data indicates to be true also in teacher-oriented lessons in high schools. It is suggested that a continuity in teaching methods between high schools and university, both characterized by a lack of feedback, should not lead to student disorientation.

in some universities, methods would be similar to those mentioned in many classrooms, e.g., lecture and one-way communication; difference is the freedom in the uni. not to do the work.

8.

The author could have proved that first year university students are disoriented by providing student marks in university or determining how many first year students actually failed. Unfortunately he does not do so.

CONTRIBUTION OF THE STUDY.

The author's study is valuable in that it is a readable descriptive analysis built on a foundation of facts concerning teaching fashions as linked to examination success. The data is collected from students by a random choosing process and is rationally linked together to illustrate the greater success of student oriented lessons in achieving superior exam results.

The data and conclusions are linked to the Birmingham region and it is impossible to generalize concerning England or to predict future university adaptation by sixth form students. The author's open-ended study does suggest useful lines for further research such as flexibility and rigidity scoring, and a study as to how teachers promote rigidity or versatility in students.

CHANGES TO IMPROVE THE QUALITY OF RESEARCH:

Although the author's methods are appropriate for finding a correlation between instructional method and sixth form marks,

they are inappropriate for suggesting predictions as to how students will adjust to university, based on sixth form teaching methods. A more appropriate methodology here would be to establish categories which relate instructional methods to research and independent study ^{and} ~~methods~~ to methods that fail to emphasize research and independent study. An actual count of lessons of both types must be kept. The author should also clarify the stated goals and instructional methods of the high schools and university so that the dissonance or congruence between the two systems would become clearer. An experimental study of the marks of first year university students comparing groups of students who had been taught by different methods in sixth form, would provide data on the degree of disorientation in university caused by different instructional methods. A clear definition of techniques essential to successful university students could also be used as criteria for ranking the success rates of different methods of tuition in high schools.

Such research would have extended the scope and increased the validity of the author's article.

Bibliography.

Books:

Van Dalen, Deobald B. Understanding Educational Research:
An Introduction. New York: McGraw-Hill Book Co., 1973.

Articles:

Wankowski, J.A. "Teaching Method and Academic Success in Sixth
Form and University." in Journal of Curriculum Studies. Vol. 6,
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