THE CONTENT OF A GENERAL SCIENCE COURSE

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As a result of a more or less general dissatisfaction in first year high school science courses, a number of enterprising science teachers have developed first year courses in general science for their classes. The marked success of these courses and a growing demand for text books on the subject have induced several of the members to reduce their material to book form. The result is that we now have several texts on this subject which, to the uninitiated, present quite a diversity in content and arrangement. Since the available material for such a course is so extensive, the question of selection is somewhat embarrassing. The way in which these different authors have answered this question presents an interesting situation.

In order to show how this has been done, we have attempted to make a comparative analysis of a number of these texts as shown in the accompanying diagram. We predict that such an analysis will be strongly resented by the authors of these texts. They undoubtedly will claim that they have attempted to embody the explanation of the most common phenomena of the child's environment without regard to any particular science to which these phenomena belong. We must confess that considerable difficulty has been encountered in trying to make the data conform to such analysis. Certain topics often involve the presentation of a phenomenon from one field and an explanation of the underlying principle from another field.

A comparison of the total number of pages devoted to the various subjects by these authors indicates in a mechanical way the average emphasis given to the different subjects. Undue emphasis should not be given, however, to such totals without keeping in mind several important facts.

First, reference to the table indicates that approximately one-half of some of the texts are devoted to material usually presented in one of the special sciences. Nevertheless, many schools claim that their course in general science is not based on or organized around any special science. It will be noted also that some of the large totals are not due to special emphasis by all of the texts, but to a predominating emphasis by one or more texts.

Secondly, the selection of this main theme around which the course is organized may be determined by the chief interest of the author because he feels that he can present the subject better in this way. This fact is in no way considered a criticism and we feel that teachers should be given much freedom in selecting texts adapted to their chief interests.

AN ANALYSIS OF GENERAL SCIENCE TEXTS

Author	Publisher	Preliminary	Astronomy	Bacteria & Hygiene	Botany	Chemistry	Geology & Mineralogy	Physiography	Physics	Physiology & Hygiene	Sanitation and Hygiene	Zoology	Appendix	Glossary	Index	Total
Barber	Henry Holt Co.	VII	0	70	?	43	?	135	232	37	67	?	4	10	9	607
Caldwell and Eikenberry	Ginn & Co.	(14)	0	19	61	12	?	84	78	9	11	26	0	0	6	306
Clark	American Book Co.	8	0	5	5	32	?	21	222	38	12	?	0	0	11	354
Elhuff	D. C. Heath & Co.	VIII 8	7	12	45	34	?	45	170	46	23	27	4	6	5	432
Hessler	Benj. H. Sanborn	(13)	?	34	30	64	?	50	136	87	32	26	10	4	12	485
Pease	Chas. Merrill Co.	12	33	0	40	20	23	72	88	?	?	18	0	0	9	315
Snyder	Allyn & Bacon	XVII	15	5	48	?	?	321	29	18	?	18	6	0	10	470
Total		87	55	145	229	205	23	728	955	235	145	115	24	20	62	2969

Thirdly, there doubtless is variation in opinions as to the course which should immediately follow this first year science. At least one author states in the preface of his text that certain material has been omitted almost entirely in order that it may be taken up in a subsequent course. This is probably more particularly true of the biological group of sciences.

Fourthly, it seems that few if any of the authors intend all of the material presented in their texts to be used in any class. Since the subject so easily permits of variations, it seems not only feasible but in some cases advisable that the indivdual teachers should modify the work according to their several needs.

Fifthly, a comparison of the laboratory experiments arranged by the different authors to accompany their texts reveals some differences in emphasis from that made in the text. Additional problems and experiments which are provided may be omitted in some cases and extended at more or less length in others. Since the laboratory work either as demonstration or as individual exercises comprises an important part of the course, we feel that the teacher should use considerable choice in selecting laboratory material.

We wish to acknowledge the help of normal students and assistant teachers in preparing this analysis. We invite criticism of this paper from authors and interested teachers.