3-1-1937

Virginia Teacher, March 1937

State Normal School for Women at Harrisonburg (Harrisonburg, Va.)

Follow this and additional works at: http://commons.lib.jmu.edu/vateacher

Recommended Citation
Virginia Teacher, March, 1937, XVIII, 3, Harrisonburg, (Va.): State Normal School for Women at Harrisonburg.

This Article is brought to you for free and open access by the JMU Special Collections at JMU Scholarly Commons. It has been accepted for inclusion in Virginia Teacher by an authorized administrator of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.
ARTHUR BEVAN gives the geological explanation of why the Shenandoah Valley is where it is • • • • • • •

PAUL HOUNCHELL undertakes to show what the modern high school should teach—and why • • • • • • •

BETTER SALARIES; LONGER SCHOOL TERMS
TEACHER TENURE LEGISLATION

Reviews of Books and Films
News of the College and Its Alumnae
CONTENTS

The Shenandoah Valley: Why It Is Where It Is .......... Arthur Bevan 45
The High School as a People's College .................. Paul Hounchell 49
Part III—What Should the High Schools Teach? ....... 55
Teacher Tenure .................................................. 55
Better Teachers Salaries and Longer School Terms .... 57
Einstein Considers Education ............................... 58
Uses of Cellulose ............................................... 58
The Teacher's Joe Miller ..................................... 60
Educational Comment ......................................... 61
The Reading Table .............................................. 62
News of the College .......................................... 64
Alumnae Notes ................................................ 67
Film Estimates .................................................. 68

$1.50 a Year  Published Monthly except June, July, and August  15 Cents a Copy

THE VIRGINIA Teacher is indexed in the Education Index
published by the H. W. Wilson Co.

---

Of Interest to Business Teachers

STUART TYPING

KEYBOARD MASTERY OF THE VOCABULARY OF BUSINESS
BY THE HIGH FREQUENCY WORD PATTERN METHOD

Applies recognized laws of learning so that the student learns easily and quickly, and prepares him for business situations. All copy for timed tests included in text. Forms and Teacher's Manuals. ONE-YEAR or TWO-YEAR courses.

Kanzer and Schaaf

ESSENTIALS OF BUSINESS ARITHMETIC

For one-year or one-semester high school courses. Based on real business situations. Unit organization and provision for individual differences. Abundant problem, drill, and review material. Teacher's Manual.

Morrill, Bessey, and Walsh

APPLIED OFFICE PRACTICE


D. C. HEATH AND COMPANY
180 Varick Street  New York City
The Shenandoah Valley: Why It Is Where It Is

Shenandoah Valley—"daughter of the stars"—is renowned for its scenic beauty, eventful history, spectacular caverns, unique Natural Bridge, and excellent farms and orchards. Those who live in the Valley or travel often through it take most of these features for granted without either wonder or curiosity as to their origins. Many visitors come and go, and they too admire the scenery and the products of the soils, and take them for granted—as they often do natural features. Some are impressed by the awe-inspiring natural wonders and become inquisitive about them. Only a few, however, stop to ask Why? and How? and When?

Many observers or readers no doubt would be surprised at the statements that at one time there was neither Shnandoah Valley nor Blue Ridge; that at one time the whole region was an indistinguishable part of a vast plain sloping gently toward the Atlantic; that still earlier the Valley region was occupied by great mountain ridges; and that in still more remote times it was at the bottom of a huge shallow mediterranean basin that was many times inundated by waters from the Atlantic, Arctic, and Gulf seas. Strange as it may seem, those are facts, recorded indubitably as "current events" of past geologic cycles.

A reviewer once aptly stated, "Science as well as fiction has its mysteries, clues, and detectives." Shenandoah Valley had many geologic mysteries—all long unsolved, some still to be solved. The detectives are the geologists and engineers, either professional or amateur, who have studied the natural features of the Valley and other regions in the search for scientific truths or to make some contribution toward the conservation and development of age-old mineral resources and water supplies. The clues are numerous, but like all clues that lead to the deciphering of mysteries, one must understand how to recognize them and how to interpret them when they are discovered.

About 140 years ago it was first recognized in a scientific sense that ordinary processes working at and near the surface of the earth accomplish certain definite far-reaching results. It was soon deduced that these processes had acted in the same manner, producing similar results, throughout geologic eras; for example, the first rains that ran vigorously down slopes eroded rocks and soils just as they do now under similar conditions; or, as waves beat upon coasts in times of storm and tear down the weaker rocks, so, since time immemorial, have lands disappeared gradually into the seas. Thus it has been axiomatic for decades that geologic agents and processes have always operated in ways similar to those we can now observe.

All landscapes have been sculptured and modeled by geologic processes. Hills, valleys and plains have inscribed in their features records of the processes and the agents that fashioned them out of the rocks of the earth's crust. Each landscape, like the floor of Shenandoah Valley, resembles a tapestry of interwoven patterns of ancient events. The patterns and the details of the physiognomies of all topographic features are full of significance to trained interpreters.

Each layer of rock in the Valley is literally a manuscript of contemporary earth history. In it is recorded something of the nature of the lands from which the sediment was derived, the agent of transportation, the distance of travel, and the environment in which the material was deposited. Some rocks give clues also as to the contemporary
climates. The fossils—remains of ancient plants and animals—in many beds give indications of the floras and faunas of those times. More than that, they generally suggest whether the sediment accumulated on land, in lakes, or in seas. They afford reliable clues also to trace out the extent of ancient inland seas and their connections with the principal oceans or with seas that inundated other lands. For example, limestone beds in the Valley contain fossil marine shells that are found also in similar rocks in the Arctic and Baltic regions.

To complete our investigation of data bearing on the origin of Shenandoah Valley, we should note briefly certain observable geologic features. The rocks of the Valley are virtually all sedimentary, that is, they were once particles of sediment derived directly or indirectly from older rocks. They are now chiefly sandstones, shales, and limestones, that is, cemented and solidified beds of sand, mud, and limy mud or ooze. Surficial deposits of boulders, gravel, and sand are found in many areas, particularly not far from the larger streams. Peculiar masses of limy materials have been deposited in some stream beds and in the large caverns. In a few places, bodies of dark-colored crystalline rocks are found. These are masses of molten rock that were forced upward into overlying rocks where they cooled and solidified.

Casual observation shows that the stratified rocks of the Valley are not horizontal—the position in which the sediments were deposited—but are tilted at gentle to steep angles. Closer examination shows that the beds generally have definite trends to the northeast and the southwest, roughly parallel to the Blue Ridge. In some stream gorges and road cuts, complete folds, arches, or downwarps, can be seen.

The topographic features of the Valley at first appear quite diversified, but they can be readily catalogued. Observation from some high point, as the Skyline Drive, shows that the Valley has a broad undulatory floor, almost a plain. The most prominent feature rising above this general level is Massanutten Mountain. Here and there low ridges or rounded hills also rise above the Valley floor. Close inspection shows that the present drainage is well below the general plain, that the floor itself has been carved into a series of ravines and broad valleys with intervening broad flattish uplands a few hundred feet above the major streams. Bordering Shenandoah Valley are two prominent mountain ridges, the Blue Ridge on the east and North Mountain on the west. From an elevated observation point it will be noted that the crests of these two ridges and that of Massanutten Mountain have many points at approximately the same altitude. On parts of the adjoining Blue Ridge, broad flats—such as Big Meadows—are present.

Shenandoah Valley has specific characteristics that more or less distinguish it from other geographic units, either in Virginia or in the Appalachian province. They include its general form, topography, altitude, drainage, size, and location. Its caverns and Natural Bridge are in some respects unlike those that occur elsewhere. The rocks, mineral resources, soils, and water supplies, while by no means unique, are nonetheless distinctly characteristic. All of these individualistic features are the result of the geologic history of the region, the present end-products of geologic processes operating through incomprehensible millenia. Even the climate and the vegetation are to some extent products of that chain of events. Human activities and history also, so far as affected by environment, no doubt have been different in the Valley than they would have been if the sequence of major geologic events had been different or if the geologic and topographic features, such as mediterranean seas, high mountains, or a vast coastal plain, were those of some former geologic era.

From the evidence recorded in the rocks and the landscapes of the region, the se-
quence of events in the geologic panoramas of Shenandoah Valley can be sketched in broad outlines. Many details remain to be determined by intensive studies.

The first panorama that we may envision is that of a broad piedmont plain extending from uplands in what is now Tidewater Virginia westward far into the interior of the continent. The records are so meager and so obscured by subsequent events and the time elapsed since then so long—some hundreds of millions of years—that we can never know much about the characteristics of that ancient land. Earth historians generally think of the region as having a mild to temperate climate and as being devoid of vegetation, unless of the most primitive types.

During the Paleozoic era—the time of "ancient life"—the panorama changes. Relatively shallow mediterranean seas very slowly invaded an elongate trough that was slowly sinking in respect to sea level. This trough extended at times from the Gulf of Mexico area northeastward across the site of the Valley of Virginia and the Blue Ridge via the St. Lawrence basin into the Atlantic Ocean. From epoch to epoch it was some scores to a few hundred of miles wide. Some seas overspread all of Virginia west of the Piedmont province and some invaded parts of the Piedmont region at least as far east as the eastern parts of Buckingham and Prince William counties. During some geologic epochs there were seaways that connected the seas in Virginia with the Arctic Ocean and during others, with the Pacific Ocean. Many times the seas withdrew from the Appalachian trough, leaving the site of the Valley a low land area.

During much of the Paleozoic era Tidewater Virginia and the continent far to the east were occupied by uplands, perhaps at times mountainous. From these uplands streams carried gravel, sand and mud into the western sea, until huge deposits of sediment had accumulated in the sinking trough. As the particles were cemented and compressed together, the present conglomerates, sandstones and shales of the Valley and adjacent mountains were formed. Some of the sandstones no doubt represent old sea beaches and some of the shales suggest extensive mud flats. At one time the southern part of a huge delta spread over the northern part of the Valley area.

During many epochs of the Paleozoic era the marine waters were rather clear. In consequence, huge deposits of limy mud and ooze accumulated, formed in part by chemical and biochemical processes in the seas and in part from the shell debris of countless hordes of shellfish that lived in those seas. Thus we find in Shenandoah Valley thick limestones alternating with sandstones and shales. In the latter part of the era extensive swamps lay over the area now in the western parts of Augusta and Rockingham counties. The vegetation in those swamps accumulated and decayed through millenia to produce ultimately the beds of coal now found between North and Shenandoah mountains. Those coals probably were formed also in at least the western part of the Valley, but if so, they have been eroded away.

These inferences about the scenes in the Paleozoic panoramas are based upon the characteristics of the rocks in Shenandoah Valley and its environs, their distribution, and the entombed fossil invertebrates and plants as well as upon the application of axiomatic principles of geologic interpretation.

The thickness of the sediments that accumulated in the trough in the Shenandoah Valley region has an important bearing upon the subsequent history of the Valley and its present location and characteristics. That thickness, as now measurable across the exposed edges of the tilted rocks, is enormous. Including the strata exposed in the North and Shenandoah mountain area, which formerly without much doubt extended also into the Valley, the total thickness is at least 20,000 feet and may be as
much as eight miles. As the younger Paleo-
zoic formations have been entirely eroded
from the region, the original total thickness
of the formations in the Valley was even
greater. These enormous deposits suggest
not only the depositional processes and the
time involved but also the magnitude of the
lands that wasted away in eastern Virginia
and elsewhere to produce the sediments.

Toward the close of the Paleozoic era the
appearance of the Valley region and of the
entire Appalachian province slowly changed.
The thick pile of sediments was steadily
crushed from the southeast so that the strata
rose in billowy folds, crumpled much like
sheets of cardboard into a series of great
arches and intervening downwarps. It was
as though this sector of the earth’s crust
were squeezed by a huge irresistible piston
against the resistant interior mass of the
continent. In some zones the lateral pressure
was so intense and long-continued that the
rocks were stretched beyond their elastic
limits; hence they broke along great linear
fractures, or faults, and thick blocks or
slices were shoved for miles to the north-
west. These folds in general had a north-
east trend, to which the present trend of
Shenandoah Valley corresponds.

This profound deformation, consisting of
folding and faulting and marked elevation
of the area, was the second type of geologic
event that was directly responsible for the
location of Shenandoah Valley and some of
its specific characteristics. It produced the
ancestral Appalachian Mountains, of which
only the “roots” remain today.

As the uplifted rocks were vulnerable to
the agents of erosion, the newly formed
mountains began to disintegrate piecemeal.
Gravel, sand, and mud were carried to dis-
tant seas by flooded rivers of those times.
The wearing away of the Appalachian
Mountains was a very slow process, pos-
sibly on the average not more than a foot
in several thousand years. Eventually, how-
ever, the great folds were worn low and
bevelled so that the Valley region was part
of an extensive plain, part of which sloped
gently toward the Atlantic. A few hills of
more resistant rocks, such as Stony Man
and Hawkbill in the Blue Ridge, rose above
the general level. The major streams of
that time probably meandered widely over
the low plain. A few, like the Potomac, rose
far toward the west and flowed toward the
Atlantic, whereas others, like New River,
rise toward the east and flowed westward.
The reduction of the ancestral Appalachian
Mountains to the widespread plain was the
third great event—the chief event of the
Mesozoic era—so far as the ancestry of
Shenandoah Valley is concerned.

The fourth great event was a series of
gradual vertical uplifts and gentle warpings
of the region, in the latter part of the Mes-
ozoic and the early part of the Cenozoic
eras. As the erosive powers of the sluggish
streams were renewed, they began to cut
their channels down toward the level of
the sea. It should be noted that they were
flowing across more or less parallel belts
of resistant and weak rocks. The greatest
erosion was obviously on the weaker rocks,
such as the limestones and shales that un-
derlie Shenandoah Valley. The more re-
sistant rocks, such as the sandstones, were
eroded less rapidly; hence they cap and have
held up prominent ridges like Massanutten
and North mountains. Resistant crystalline
rocks have helped to maintain the altitude
of the Blue Ridge above the Valley.

Flattish remnants of the ancient extensive
plain that bevelled the folded and faulted
rocks are found in some places, as at Big
Meadows along the Skyline Drive. The
more or less uniform altitudes of the crests
of the linear mountain ridges west of Shen-
andoah Valley suggest also the truncation
of the great folds in the ancestral Appa-
lachian Mountains.

After the early Cenozoic erosion of the
limestone and shale belts had developed the
broad undulatory floor of Shenandoah Val-
ley, there was again gentle vertical uplift.
The streams were rejuvenated and began
cutting downward. As the larger ones had been meandering across the broad erosional plain—the floor of the Valley—they entrenched their winding courses by this downward cutting, thus perpetuating such features as the "horseshoe bends" in the two branches of Shenandoah River. This latest downward cutting is apparently still in progress.

Numerous secondary features of considerable interest have been developed during the more recent cycles of uplift and erosion. Low hills and ridges that rise above the general level of the Valley floor are capped by more resistant rock which has locally retarded erosion while the surrounding weaker rocks were worn away. The undulatory floor of the Valley is in part due to solution by ground water, giving rise to abundant sinks and numerous caverns. Natural Bridge has been developed by extensive subterranean erosion along a narrow zone with subsequent collapse of the greater part of the roof of the underground channel.

The location of Shenandoah Valley is thus due to a definite succession of geologic events. The principal groups of events in the long panorama have been (1) the deposition of a thick mass of sedimentary rocks of diverse hardness in the great trough that occupied the Valley region; (2) the deformation of these rocks into a great series of elongate sub-parallel folds that were uplifted far above sea level; (3) the erosion of those ancestral mountains to a widespread plain; (4) the uplift of this plain with the consequent excavation of the Valley on the weaker rocks, whereas the resistant rocks have maintained the mountain ridges; and (5) recent uplift of this lower less extensive Valley-floor plain and its dissection into the present subordinate features.

Arthur Bevan

THE HIGH SCHOOL AS A PEOPLE'S COLLEGE

PART THREE—WHAT SHOULD THE HIGH SCHOOLS TEACH?

In two preceding articles of this series we have considered the children who go to our high schools, and what children should learn at school. The question which sets the problem for this article must be answered in terms of the other two main considerations: children themselves, and what they should learn if education is to make sense. Children must be taught as they are, in terms of their previous learning experiences, their present interests, their varying abilities to learn; their learning must be directed by wise and sympathetic teachers as interpreter-guides toward the ends which people want to work out in the lives of the children. Just as surely, the schools must teach the things which children should do in order to become a desirable next generation of citizens. To set up any other task for the schools would be foolish, misdirected extravagance.

In attempting to say what should be taught in the high schools we shall not lose sight of the basic factors which go to make secondary education. In this country it has been decided definitely through a long series of developments that high schools are popular institutions supported by all the people to serve all children of appropriate age. Even now, over sixty out of every hundred children eligible to attend high schools do go for a part of each year, and the attendance steadily grows. We also know that among these children the ranges of ability to learn, as well as life interests and character traits, vary as widely as their background of home life and family inheritances. Starting with children who compose such a cross-section of the population, using their interests and such purposes to learn as they are able to draw upon, the schools must work out in these young Americans the ends which are set as the
service of the schools. This is an undertaking magnificent in conception and peculiarly American. It is no exaggeration to say that the success of education is indeed the success of the democratic ideal.

In the final analysis there can be no temporizing nor half-way measures in a matter so far-reaching. As education succeeds the nation succeeds. The principle applies really with greatest force to the states and smaller school systems which actively carry on the educational enterprise. What children can and will do, what they are to become when they grow up, will be the democratic way. The aims which society sets for the schools must be worked out through the learning efforts of pupils. Whatever conceptions or practices or traditions are opposed to these basic considerations of children as they are, of aims that must prevail, and of learning as functional growth, must give way as fast as more efficient thinking, significant procedures, convincing results can be attained for guidance. In this sense education is never static but always in a state of flux and rebuilding. Now is a good time to ask ourselves again, "What should the high schools teach?"

1. What is Education?

What is to be taught in the high schools can be determined in part by our definition of education. There are two general ways of looking at education: first, as skill-getting, information-acquiring, habit-forming by going through certain fixed exercises that use the race accumulation of cultural materials; second, as a series of meaningful, child-centered experiences in life-like situations which extend, enrich, co-ordinate, and vitalize the ordinary happenings in the normal lives of children. The first view holds in effect that education for any child is a frontal attack upon a list of skills to be learned, upon a static mass of facts and information to be acquired, and that out of these skills and knowledge, when and if acquired, will come a larger life of usefulness, enjoyment, culture, and desirable ways of living. This is the conception of education which generally prevails.

The other view of education holds that emphasis is upon the learner—what he does and thinks, how he feels about it, and what use he makes of his learning. By this view, education becomes a process of growth and living. Thinking, acting, behaving are more important than memorization of words and lists of facts or the practice of skills. Education should consist of training which will go on throughout life, following up the concentrated period of schooling in the most formative years. Indeed, present conditions give more years and longer terms than formerly to schooling so that growth may be more orderly and richer.

Some one has said in effect that education consists of what is left to one after he forgets most of what was learned at school. Against such a facetious definition we may balance this statement in a leading textbook on secondary education:

"Education does not consist of, and cannot be measured by, what a boy or girl can do on a certain day in June of his or her senior year in high school—or at any other particular moment. Education consists of his or her will to do, to be, and to control. It depends on his or her readiness to use the tools and procedures with which he or she has practiced in connection with school and affiliated educational institutions. For if the mind-set and self-confidence are right, the individual will go right on learning throughout life. . . All that we can judge at high school commencement is the value of this promise of continued growth throughout life."

If we look for the most desirable results of education in any individual, will they not consist of wanting right things, a better ability in self-control, an understanding of the forces of nature and people, a recognition of the values of co-operation to the end that he can satisfy these wants? This type of education is just the opposite of static. It is functional and vital, always a growing and a becoming.

II. What is the High School Curriculum?

The course of a child's study must be so ordered as to result in education for him
and to make of him the desired type of adult as a mature citizen. In the schools we should seek to order the course of children’s studies so as to use their experiences and activities as a means to their education.

The curriculum for any child consists of all his school experiences as they tie up with the rest of his living in the same period. A high school pupil spends 800 to 900 hours a year in school and about five times as many other waking hours out of school. To attempt a separation of the two would seem to be the height of foolishness, yet education has traditionally been a matter of taking enough time out of life to get school training. It is true teachers make a great many assignments to occupy children’s time in the form of home work, but only the ambitious, interested, or conscientious pupils do the assignments up to a standard beyond the absolute danger line. The quality of performance taken as a whole is shockingly low, and many of the pupils do not work at the assignments at all. What pupils do at school is becoming in increasing measure all they get.

The planned curriculum of the schools should serve to guide, reinforce, direct learning activities, in school and out. The curriculum is an instrument, not an end, because experiences count and facts may not. Conventional learnings are only marginal dead wood until they become ways of living. Human beings learn what they do. What the individual pupil does, how he feels about it as he does it and as he finishes it, whether he has much success in the doing, and whether he finds usable what he has learned in a way that will serve his purposes, what satisfaction and self-approval comes into his life out of learning that carries into after-school living—these factors determine what is the real curriculum of a given child.

III. How Does Subject Matter Come In?

Such a definition of education as that offered above, or statement of curriculum in terms of the learning activities of children, seems rather far-fetched when compared with what goes on in the average classroom of the average high school. American secondary schools have always centered upon subjects to be mastered as the way to education.

Until less than a hundred years ago the classics, dead foreign languages, and time-approved literary selections in English, dominated secondary schools. They were accompanied by mathematics of the very abstract and abstruse types and some ancient and foreign history. Then modern foreign languages, American history, and certain sciences slowly took hold and gained approval. About fifty years ago the larger schools increased offerings to include more practical matters of home, industrial, and commercial arts. The rural schools have steadily increased the offering of home and agricultural subjects as a result principally of federal support. Some systems added music and a variety of other fine arts from time to time, but a number of these subjects are still regarded by substantial tax-paying citizens as in the “fads-and-frills” class. Today the high school offering is a hodge-podge of subjects that fit together according to no pattern of rhyme or reason in the larger schools. Even small schools attempt to offer more subjects than can be really taught by a few teachers not well-prepared for the subjects.

Now let us face the facts and see where this accumulation of subjects has led us in secondary education. The total effect is certainly subject-matter domination as opposed to any considerations of child-centered schools. Several items which enter into the picture will make this point clear:

1. There is a nearly complete dependence upon textbooks, with their content logically organized by their college-professor authors. This content becomes actually the course of study for the year or semester. There may be a teaching syllabus, or some form of
outline, but the pupil has the textbook and is supposed by all to learn it.

2. The teachers are subject-matter specialists in their own education, who are likely to see each pupil only as a potential scholar or failure in the specialty that is taught. They become truly teachers of their subjects. The children are supposed to learn it, aren't they? If not, why not? So what!

3. There grows up for each teacher and subject a completely mechanized, synthesized system of assignments for home work with results already pointed out above. The teacher becomes an assigner of work, a recitation hearer, a tester, and the youngsters scramble for themselves, inventing all the labor-saving machinery and short-cuts they can. When they serve their time they get their credit, don't they?

4. Tests are periodically emphasized, reviewed for, administered with fear and trembling by those on the receiving end; findings are laboriously arrived at and solemnly advertised by teachers and pupils; and finally the standing of pupils is revised according to results, even to changes in the time of graduation for certain pupils.

5. There is an annual scramble among pupils to decide upon the lesser of evils in making choices of subjects allowed by the rules, but usually with no thought as to which will contribute most to growth and after-school education. Pupils and parents are in pretty constant and thorough confusion, because there is no definite notion as to what all the scramble is about, with goals not very well visioned nor consistently followed.

6. The result of it all is that in a year after a course is finished the pupils have forgotten about eighty per cent of what they tested to know at the close of the course when they threw their books away. At that rate of forgetting, life will soon become real and earnest—not cluttered up with book learning any at all! Perhaps that is the reason that the average high school or college graduate gives so little evidence of having attended an educational institution!

The above picture may be overdrawn in places, but it is underdone in others. The matter of deciding what subjects should be offered in high schools is one of the really big problems in education. In the very small towns and rural schools the problem is highly puzzling, so much so that one authority has pointed it out as one that takes on national proportions. Some suggestions for sensible solution will be offered in a later section of this article.

Our sense of values of subject matter seems to be mixed to the extent that we follow many patterns built upon many different and opposed philosophies. We think of subjects as being immediately useful in making a living, as having intrinsic values for after-school education, as being preparatory to some later educational undertaking, as contributing to a trained mind, as being the way to culture, as contributing to the proper use of leisure, or as guaranteeing the formation of character traits. We argue about specific and general mental disciplines, about the "softness" of progressives or the "drudgery" of scholarship, about cultural as opposed to utilitarian values. But we go on teaching subjects and counting credits and holding fear of failure or low marks over the heads of children as a reason for doing their work in prescribed ways and up to set standards.

What are the legitimate values of subjects in the work of education? They must contribute in their outcomes to the skills, knowledges, and attitudes which it is the work of the schools to teach, if they are to be justified with a place in the scheme of things. These criteria are proposed for any given subject, all of which require positive answers:

1. Does it inspire or challenge adolescent children?

2. Do pupils who take the subject engage with enthusiasm in learning and applying
the facts and procedures with which the subject deals?

3. Does earnest effort in the subject bring success for all who are required, or advised, or allowed, to take it?

4. Does the subject contribute through the activities and experiences of pupils to the attainment of the aims of education?

5. Can pupils use their interests and previous experiences in learning the subject? Do other interests grow out of the subject?

What we are discussing here is not concerned with the rationalizing which teachers and specialists offer to justify their subjects. We are all familiar with the argument that improvement of written and oral English will certainly come from the study of grammar, rhetoric, and literature. But does it, as these subjects are usually taught? Not quite convincing is the point that worthy home membership will be assured by the study of dietetics, textiles, and diseases in home economics classes. The fact that high school graduates rarely read any Latin, or French, or Shakespeare, or history, or solve any mathematical problems is really what counts. Either such matters do not connect with life or they set up an attitude of avoidance. Either count takes away most of the justification for teaching them as subject matter.

The changes which take place in the lives of the pupils when subjects are studied really measure the values of the subjects. The superficial notion that subject matter is something which teachers will convey to pupils, which pupils will learn to recite, and which the world will profit from by reason of the teacher-pupil performance is about ready to give way to the stern fact that pupils really learn only what they experience in meaningful ways—that there is no large or magic transfer from subject matter taught as such to life that deals with human relations in specific situations and patterns.

IV. High School Graduation

The foregoing statements bring us inevitably to standards for graduation from high school. What requirements should obtain for the completion of the work for any given pupil? They are a short list and can be easily stated: regular attendance, co-operation with teachers and fellow-pupils, good citizenship at school which points to a like course in life, faithful application to learning activities, success in school work up to the level of ability to learn, reasonable mastery of fundamental skills really used by most people. These are human-worth standards. Any person who can meet them all will surely become a profitable member of society.

The requirements should not include the necessity to take difficult, even so-called scholarly, subjects and to measure up to any set standard of excellence in them, desirable as that may be for a number of other purposes. The people's colleges should be popular institutions, not closed to pupils of even low-average ability, and free from even intellectual snobbery. Entrance to college for students who will go should have nothing to do with graduation from high school.

V. College Entrance Requirements

The “big bad wolf” of the high school arrangement of subjects and graduation requirements is the possibility of entrance to a college somewhere, even if most of the graduates never get there. In order to dispense with this difficulty quickly, several points may be sharply stated which should clear up the matter:

1. Pupils who expect to go to college should study carefully the requirements for entrance and meet them by appropriate choices of subjects.

2. Nearly all colleges are more liberal than formerly as to entrance. Many institutions of high standing practically accept a high school diploma and the principal's recommendation. Practically any college will accept four years of English, with no questions as to content. Most will accept any four units of social studies offered.
3. Not all high school graduates should expect to go to college. Only pupils who have made scholarly success in high schools which predict like success at college should be accepted or recommended.

4. To qualify for college entrance is not a proper requisite for high school graduation. Clear thinking on this point will help both high schools and colleges.

5. High schools should make a reasonable attempt to prepare for college those pupils who want to go. The school has no moral right to take advantages away from most pupils in order to serve a select few. The few should make the adjustment, even at some extra cost of effort and money.

VI. The Virginia Curriculum Proposals

Virginia has made an approach to curriculum revision for high schools which is probably highly significant. It seems to be a sincere effort to approach education from the viewpoint of children's interests and experiences through an organization built around functions of life and adapted to the ages of children. The aims of education are stated and used to check against all suggested content. Probably as wide a range of subject matter as occurs in any other state course of study is suggested in the Virginia proposals, but all of it is put into relation with children's interests, the main aspects of present living, and the ends which adult society wants to see come out of the schools.

Of course, many abstractions and eruptions do not appear. Textbooks are made incidental to learning and properly put in their place as references. Skills are emphasized as tools in learning and useful accomplishments for life. Information and facts come in for their bearing on problems of living which pupils face daily in their personal affairs. Always it is expected that attitudes and appreciations will develop as the final tests of the worth of the schools. By all the standards proposed in this article the Virginia proposals, so far as they are worked out, are as good as any yet brought forward.

The matter of bringing the Virginia plan into wider use gives some concern at present. The state authorities have wisely taken the position that the materials are now in experimental form and that their use should be voluntary, optional with each school system or with the schools in any system. This allows schools to undertake the new plan as they are able or willing. In this way schools tend to classify themselves and their leaders: some go forward with the new plan in fine style; some use modified plans and participate in part; others do lip service by merely adopting a new name for old procedures in the same subjects as always; still others make no pretense but stick doggedly to the old line of subjects taught as subjects. Teachers tend to classify themselves in much the same way. Some study the suggestions, adopt them when they can but more often adapt them to their own situations; others do not study, assume that old plans are good enough, thus passing up real opportunities for growth in their places of leadership.

The Virginia state authorities have proposed an organization of the four-year instructional program so that ten graduation units may be granted for work not done as separate subjects, but having the time equivalent of subjects, with six units to be elected from strictly subject matter fields. This is not so far from the present practice which offers any four units of English and any four of social studies, with the other eight from mathematics, science, and other fields. Neither high school graduation nor college entrance should be allowed to prevent better arrangement of subject matter such as proposed in the Virginia curriculum. Some high school principals and teachers are at present the greatest obstacles to going ahead. Perhaps young teachers who come into the service will be ready to bring a fresh attack to an old problem.

It is perhaps fortunate that Virginia does
not attempt to go ahead too rapidly with new curriculum plans. History recalls that Ben Franklin's conception of a vigorous new institution which became the American academy was formalized to its downfall by school people who embraced it as friends.

**VII. Conclusions**

Dr. Thomas Briggs suggests that we need an educational Moses to lead us out of the wilderness of ideas about curricula and that, should one come, he would need all of the biblical allotment of forty years on the high school job. That may not be so far from the truth. Other authorities have estimated the "educational lag" at about fifty years.

What should the high schools teach? We already know in our thinking what the answer should be: what children have the ability to learn; what they will learn, being such children as they are and living when they live; what they should learn in order to be what they ought to be. We are just as sure that the answer will not call surely for any fixed subject matter that has no better authority for use than the traditions of the past or the rationalizings of teachers whose job it is to teach it.

We should take the steps which will lead gradually to making children the center of learning situations, even in high schools. We should proceed as fast as we can get workable plans and teachers who are interested in children more than in school subjects.

**Paul Hounchell**

**TEACHER TENURE**

**The Interests** of the child and of the profession," it is stated in the platform of the National Education Association, "require teachers who are protected by effective tenure laws from discharge for political, religious, personal, or other unjust reasons." For more than twenty-five years, therefore, the Association has been encouraging the various states to establish tenure laws. Not tenure laws which will afford special privileges to the teacher who is incompetent or guilty of improper conduct, but tenure laws that will safeguard the efficient teacher in his efforts to serve the nation loyally and courageously—this is the objective.

**Tenure Protects Children**

A good tenure law protects children against incompetent teachers and promotes efficiency among competent teachers by safeguarding them in their efforts to serve loyally and courageously the children and the nation.

**Tenure Protects Competent Teachers**

Tenure promotes efficiency by encouraging competent, public-spirited teachers to remain in the schools. It safeguards their rights and gives them the security of position to which professional workers engaged in public service are entitled. A modern tenure law provides that teachers of proven ability who are serving satisfactorily may be dismissed only for unprofessional conduct, incompetence, immorality, insubordination or neglect of duty.

**Tenure Eliminates Incompetent Teachers**

A good tenure law protects the children against incompetent teachers by prescribing a legal and professional procedure for the elimination of unfit teachers. It provides that any teacher recommended for dismissal shall receive a written statement of the reasons for the recommendation and a fair hearing.

**Tenure Increases Efficiency**

Tenure promotes efficiency by relieving teachers from the nervousness and anxiety which are inevitable where the practice of annual election prevails. Uncertainty of reappointment acts as a drain on the nervous energy of teachers and renders them incapable of doing their best work with children.

**Tenure Makes Teaching Attractive**

Tenure promotes efficiency by making teaching more attractive. If we are to have as teachers for our children the superior men and women whom we desire, we must guarantee them a reasonable degree of se-
TYPES OF STATE LAWS ON TEACHER TENURE

No legislation; or annual election plan
Permanent tenure after probationary period
Continuing contract
Contracts permitted for more than one year
Permanent tenure after probationary period in certain districts; either no legal provisions or annual election in others

Contracts permitted for more than one year in some districts; either no legal provisions or annual election in others
Permanent tenure compulsory after probationary period in certain districts, optional in others
Three types of provisions in different areas
Continuing contract in all except first-class districts

Security in their positions. Young men and women of high quality will not continue to choose teaching as their vocation if it continues to be a hazardous occupation with regard to security of position.

Tenure Reduces Patronage Pressure

Tenure promotes efficiency by reducing the pressure of patronage seekers. School boards are invested by law with the responsibility for employing and dismissing teachers. While modern school boards delegate this duty largely to the superintendent and his staff, the ultimate responsibility rests on the shoulders of the board. School board members, as well as the superintendent, are therefore constantly exposed to pressure for appointment favors. Tenure regulations prevent the discharge of competent teachers. This reduces the number of vacancies available each year and tends to keep the schools free from political, religious or commercial domination.

Progressive States Provide Tenure

Tenure legislation is not new or untried. It has existed for many years in numerous European countries. The first American state to pass a tenure law was New Jersey in 1909. Today sixteen states have legislation protecting some or all of the teachers within their borders. These are: California, Colorado, Delaware, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Minnesota, Montana, Nevada, New Jersey, New York, Oregon, Pennsylvania and Wisconsin. Tenure legislation is being urged in a number of state legislatures this year.
BETTER TEACHERS’ SALARIES AND LONGER SCHOOL TERMS

APPEARING before a joint meeting of the Legislative and the Retirement committees of the Virginia Education Association recently, Dr. Sidney B. Hall, Superintendent of Public Instruction, urged that increases should be provided in the pay of Virginia teachers to forestall their withdrawal from teaching into the business world.

He cited the instance of a Richmond school principal who resigned a $2,000 job to accept one in business paying $2,800. The average salary now paid in Virginia to city elementary school teachers is $1,029, to county elementary school teachers, $535; to city high school teachers, $1,353; to county high school teachers, $778.

A letter addressed to all division superintendents and school board members of the state has also gone out from the superintendent’s office in support of this issue.

"During the past few weeks," Dr. Hall wrote, "my attention has been called to the very serious problem of securing adequately prepared teachers for vacancies that are occurring in the teaching force of the State. In addition the point is being made that many of our best prepared teachers are being lured away from teaching positions by more lucrative offers in other fields of endeavor. This is a most distressing situation. After discussing it with many superintendents, I am convinced that there is only one answer to the problem: In all cases there should be full restoration of salaries and for most teachers substantial increases should be provided. We cannot expect to attract to the teaching profession teachers of the best intelligence and ability unless we offer adequate compensation. Neither can we hold those already in the profession unless we pay them salaries commensurate with their training, experience, and the responsibilities placed upon them.

"May I, therefore, urge you to provide in your budget for 1937-38 adequate salaries for teachers? If this is done, you will have guaranteed to the children their inherent right to be well taught.

Another matter that should be given serious consideration is the problem of the length of school term. For several years we have been maintaining a uniform eight months’ term, or 160 teaching days. In fact we averaged 169 days during the past year for both elementary and high schools. Prior to the establishment of the eight months’ term for all schools, we maintained nine months for high schools throughout the state. Many of the supporting schools, however, were maintained for much less than nine months. It now seems highly desirable that we seriously consider the establishment of a nine months' school term as the minimum for both elementary and high schools for the session 1937-38. To accomplish this, provision must be made in the annual budget for such extra days as may be necessary to make up a full nine months’ school term.

"In this connection it might be well to mention that the new manual of administration for high schools will be ready for distribution in the early fall. It will be our desire to accredit all schools in accordance with the standards set up in this manual. One of the standards for accredited high schools will be a nine months’ term, or 180 teaching days; and, in addition, all schools serving as feeders to the accredited, consolidated high schools will likewise hold a similar term. Because of this I think it highly important that you consider the question of providing funds for the nine months’ school term at the earliest possible moment."

Good breeding consists in concealing how much we think of ourselves and how little we think of the other person.—Mark Twain.
EINSTEIN CONSIDERS EDUCATION

When the Regents of the University of the State of New York conferred the honorary degree of doctor of science on Dr. Albert Einstein, now of Princeton University, at its seventy-second convocation on October 15 last, Dr. Einstein delivered an address modestly called "Some Thoughts Concerning Education." Excerpts from the English translation follow:

"The most important method of education always has consisted of that in which the pupil was urged to actual performance. This applies as well to the first attempts at writing of the primary boy as to the doctor's thesis on graduation from the university, or as to the mere memorizing of a poem, the writing of a composition, the interpretation and translation of a text, the solving of a mathematical problem, or the practice of physical sport.

"But behind every achievement exists the motivation which is at the foundation of it and which in turn is strengthened and nourished by the accomplishment of the undertaking. Here there are the greatest differences and they are of greatest importance to the educational value of the school. The same work may owe its origin to fear and compulsion, ambitious desire for authority and distinction, or loving interest in the object and a desire for truth and understanding, and thus to that divine curiosity which every healthy child possesses, but which so often early is weakened. The educational influence which is exercised upon the pupil by the accomplishment of one and the same work may be widely different, depending upon whether fear of hurt, egoistic passion or desire for pleasure and satisfaction are at the bottom of this work . . .

"To me the worst thing seems to be for a school principally to work with methods of fear, force, and artificial authority. Such treatment destroys the sound sentiments, the sincerity, and the self-confidence of the pupil. It produces the submissive subject.

"The second-named motive—ambition or, in milder terms, the aiming at recognition and consideration—lies firmly fixed in human nature. With absence of mental stimulus of this kind, human co-operation would be entirely impossible; the desire for the approval of one's fellowman certainly is one of the most important binding powers of society. . . .

"The most important motive for work in the school and in life is the pleasure in work, pleasure in its result, and the knowledge of the value of the result to the community. In the awakening and strengthening of these psychological forces in the young man, I see the most important task given by the school. Such a psychological foundation alone leads to a joyous desire for the highest possessions of men—knowledge and artislike workmanship . . .

"Should language predominate or technical education in science? To this I answer: In my opinion all this is of secondary importance. If a young man has trained his muscles and physical endurance by gymnastics and walking, he will later be fitted for every physical work. This is also analogous to the training of the mind and the exercising of the mental and manual skill. Thus the wit was not wrong who defined education in this way: 'Education is that which remains, if one has forgotten everything he learned in school.' For this reason I am not at all anxious to take sides in the struggle between the followers of the classical philologic-historical education and the education more devoted to natural science."

USES OF CELLULOSE

CELLULOSE is one of the most important materials of research chemistry from the viewpoint of adding to the convenience, comfort, and length of life, according to Dr. Harrison E. Howe, editor of Industrial & Engineering Chemistry. On a lecture program before 1200 honor high school students, given recently at the American Museum of Natural History in celebration of the 109th Anniversary
of the American Institute of New York, Dr. Howe pointed out that there is no limit to the source of supply, since cellulose is one of "the building materials of nature."

Cellulose, which is the fundamental material of the structure of plants, comes from many sources, Dr. Howe stated. It may be fibrous material like cotton linters, or the woody material of spruce, or it may come from sugar cane, long leaf pine waste chips, cornstalks, or any one of many other sources.

Wood is one of the most useful of all our materials; it is the raw material for paper making, one of our highly important industries, and now it is being converted by the chemist into the most varied types of objects which bear no resemblance to the original material from which they are derived.

Wall and insulating boards made from cellulose, Dr. Howe said, have already replaced fifteen billion board feet of lumber. Veneers, of like source, make possible in many homes and other buildings paneling in rare wood types. New types of paper pulp now being developed will both relieve our dependence on foreign countries for sources of supply and will open up for development a large section of the southeastern United States. Cotton linters rank next in importance to spruce as a source of cellulose.

The plastics include shatterproof or "safety" glass, a cellulose acetate sheeting, put with adhesives between two sheets of plate glass. This glass, now required by law in some states for automobile windshields, has been an important contribution toward safer driving. Toiletware sets, toys, handbags, and scuffless heels are other uses.

Among the Fabrikoid or lacquered fabrics are book bindings, pointed out as especially interesting to students and collectors because it resists vermin attacks which have destroyed many important libraries. Commenting on the new upholstery materials in leather textures, and other types of cotton base coated with cellulose, giving the appearance of leather, Dr. Howe said that if leather were used for the purposes which these lacquered fabrics now serve, this country would have to keep fifty million head of cattle grazing. "Wooden sponges" (so called because the cellulose comes from wood) have the good qualities of natural sponges plus resistance to boiling.

In conclusion Dr. Howe emphasized to the students the future that lies in cellulose research because of its endless uses and universal application.

If it was wise, manly and patriotic for us to establish a free government, it is equally incumbent to attend to the necessary means of its preservation.—James Monroe.
THE TEACHER'S JOE MILLER

PLEASE REPORT
Teacher (the same one)—Johnny, use "statuesque" in a sentence.
Johnny (a different one)—What statuesque?

IN THE GOOD OLD WINTER TIME
"I want an all-day sucker!" the youngster demanded of the candy man.
He was handed one.
"Looks kind of small," remarked the boy.
"Certainly, the days are getting shorter."

POLITICS WILL OUT
According to a student in the English 11 class of Miss Elizabeth Allen, Chelsea, "incongruous" refers to a man who is in the legislature. Miss Allen was also informed that "a 'sonnet' is a little son," and that "Chanticleer and Pertelote were two Italian authors who influenced Chaucer."

HARD TO REMEMBER
Professor—I would like a preparation of phenylisothiocyanate.
Drug Clerk—Do you mean mustard oil?
Professor—Yes, I can never think of that name.

DONALD, THE DUCK TOO!
"Now boys," said the teacher, "tell me the signs of the zodiac. You first, Thomas."
"Taurus, the Bull."
"Right! Now you, Harold, another one."
"Cancer, the Crab." "Right again. And now it's your turn, Albert."
The boy looked puzzled, hesitated a moment, and then blurted out, "Mickey, the Mouse."

STREAMLINED TOO
Professor—This is the stadium.
Visitor—Fine! Now take us through the curriculum. They say you have a fine one here.

SOMETHING GAINED
Skjold—Has your son's college education been of any value?
Bjorn—Oh yes; it cured his mother of bragging about him.

THE MAIN POINT
British Guide (showing places of historical interest)—And it was in this room that Lord Wellington received his first commission.
American Tourist—How much was it?

PARDON THE YAWN

PAPA'S POEM
To send my boy to college
I put a mortgage on the shack;
I spent ten thousand dollars
And got a quarterback.

JUST AN EDUCATED ONE
The new maid in a Shaker Heights, Ohio, home was much impressed with the fact that the master bears the title of doctor.
She mentioned to the cook that it seemed funny he didn't have a sign on the door advertising his profession.
"Oh," explained the cook, "he ain't a real doctor. He's just one of the educated kind."

AN OBSERVATION LESSON
Teacher: "Now, Nellie, tell me, what did Belshazzar learn from the writing on the wall?"
Nellie: "That his walls hadn't been cleaned for a long while."
EDUCATIONAL COMMENT

CONFERENCE OF THE ASSOCIATION OF VIRGINIA COLLEGES

The Association of Virginia Colleges met this year at historic Fredericksburg, February 12 and 13. Dean Raymond Pinchbeck, of the University of Richmond, President of the Association, shared with Dean Edward Alvey, of Fredericksburg State Teachers College, the Vice-President, the leadership of the four conferences.

The first program, under the direction of President Charles J. Smith, of Roanoke College, concerned itself with the study of the problems and methods of administration of scholarships and loan funds by Virginia colleges. The bases of discussion were data compiled by the Southern Association of Colleges. It was clearly evident that there were no common procedures and that the data gave inconclusive results. The Association decided to continue this study in the hope that the sharing of experiences by the various colleges might be worth while.

The question of high school graduation as the sole basis of college admission was discussed Friday afternoon. The fact that the discussion was in the form of an informal debate increased the interest of the group although it became evident that each speaker conceived the problem in terms of a certain type of college, and that we were as yet unable to come to a clear agreement on this question for all types of colleges.

Since the third session concerned itself also with a study of college admission requirements, the body determined to continue working for another year in this general area. It was evident from the discussion that there was genuine concern on the part of both the high school and the college that there should be a clear understanding of each other's objectives.

The high spot of the conference was the address of Dean Marjorie Nicolson of Smith College at the annual Association dinner Saturday evening. Miss Nicolson briefly surveyed the changes in higher education whereby the earlier emphases upon intellectual and professional training have more or less given way to an emphasis upon personality. She then reported in detail the faculty procedures of Smith College in the thorough quadrennial studies of their curriculum. Smith College has recently reduced its requirements from a reading knowledge of two languages to a reading knowledge of one and has decreased the amount of specialization in the last two years of college work. In line with other schools it has grouped its curriculum materials into four divisions, namely, science, social studies, literature and art, and language. Miss Nicolson's able address stirred the organization at its last sessions to be more concerned with undertaking definite studies of college procedures as a substitute for the more or less repetitive discussion that has typified the meetings in previous years.

W. J. G.

PROSPERITY FOR WHOM?

Here are a few statements gleaned from the two leading morning papers of Chicago issued on November 12:

Survey shows depression is past. Unemploy-
ment is declining. Smaller relief rolls are indicated. Wages are on way up. People spend more freely. Better merchandise is demanded. Bethlehem Steel to build plants at cost of $35,000,000. Business distributes more millions of dollars in wage bonuses, pay increases and dividends.

The Simmons Company announced a $300,000 Christmas bonus for 12,000 employees.

The Bryant and Kalamazoo Paper Mill lifted the wages of its 2,500 workers to 1929 levels.

The Collins and Aikman Corporation gave a 10 per cent raise to all workers.

The Eastman Kodak Company notifies its workers that a wage bonus of $2,200,000 is to be paid. In addition the directors voted an extra stock dividend of $1,688,000 and an extra disbursement on the common stock of 75 cents a share.

General Motors Corporation recently voted a $10,000,000 bonus to employees.

The flow of dividends will reach the amazing total of more than three billion dollars by December 1.

We searched diligently through these same papers for statements concerning the restoration of school term and teachers' salaries "to 1929 levels." But our search was in vain. Other newspapers over the state report that a few small increases in salaries of teachers have been made, but official reports show that in general school finances have not risen far from the trough of the depression.

Local committees working for school improvement ought to make use of such news items as are quoted above. If business can spend millions for bonuses to employees already receiving more wages than teachers, more millions for plant extension, and if it can still distribute billions in dividends, it can help support schools more liberally. If we are in for another business boom with its accompanying rise in the cost of living, the schools must not lag behind in the general prosperity or they will be wrecked. The people must be made to understand these facts.—The Illinois Teacher, December, 1936.

GO TOGETHER

"A civilization cannot progress without criticism."—George Bernard Shaw.

THE READING TABLE


This is a really monumental work in the field of psychiatry. Writing from personal experience both as a physician in the common acceptance of the term and as a psychiatrist, Dr. Sadler has presented an exhaustive treatise covering the theory and treatment of mental, nervous, emotional and personality disorders. He draws from his own private practice case studies that are rich in their illustrative power and conservative in the conclusions drawn.

After a short historical introduction, the author considers in the order named the Theory of Psychiatry, Personality Problems, the Neuroses, the Psychoses, and Psychotherapeutics. A very informative glossary completes the text.

Theory and Practice of Psychiatry will be of value not only to the physician and psychiatrist, but also to teachers, ministers, social workers, and parents. As a reference work it has no equal.

C. P. S.


These textbooks for junior high schools consist of a number of applications of mathematics to various things.

The first book is divided into three parts: Part One, Getting Acquainted with Geometry; Part Two, Learning More about Uses of Arithmetic; and Part Three, Learning More about Geometry. Apparently, no formal geometry is definitely given, there being more induction and experiment than anything else. The work in arithmetic consists chiefly of handling fractions, both common and decimal, with the applications of decimals to percentage and problems in the home.

Book Two is also divided into three parts: Part One, Renewing Acquaintance with Al-
gebra; Part Two, Learning How Algebra and Geometry Co-operate (including the use of graphs); Part Three, How Algebra and Arithmetic Co-operate. The application of algebra to a large extent consists of the use of simple equations and substituting in formulas. The formal idea is presented in Part Two, while such important topics as banking, investments, insurance, and taxation are studied in Part Three.

These two books form a collection of interesting applications, but so far as the writer can see they could not take the place in the high schools of definite work in algebra and geometry for a student who expects to go to college. For a student who stops his education at the end of high school they would probably be very valuable.

H. A. C.


Along with mathematical subject matter of value as an introduction to the more formal study of algebra and geometry, and mathematical information useful to the student in almost any walk of life, this book contains also a number of exercises and drills intended to increase the student's ability to make correct calculations and to assure himself of the correctness of his work without recourse to a book of answers.

"It is of primary importance," states the preface, "that pupils in the later grades should extend and increase their mastery of the skills involved in simple computation." Apparently the book is intended for use in the junior high schools or in the first year of a four-year high school. The first chapter is devoted entirely to the arithmetic of every-day life, the next five chapters to algebra. These are followed by a chapter on Measurement and Approximate Numbers and another on Statistics and Their Use. Then follows an Introduction to Geometry, which is empirical rather than logical. The next chapter, entitled Indirect Measure-

ment, might very readily be called "a peep into trigonometry." The next eight chapters are the old style algebra in very simple form, and the final chapter is an introduction to Demonstrative Geometry.

The value of the book lies in the fact that it may give a pupil an idea of the content and usefulness of more advanced mathematics. The danger of the book lies in the fact that it may give a pupil the idea that he has really learned algebra and geometry, which of course is false.

The multiplicity of exercises in the book is in the writer's opinion a distinct disadvantage unless the book be placed in the hands of a discriminating teacher who will carefully choose the exercises and problems which are to be assigned to the pupil for preparation and practice.

H. A. C.


Ten exercise sheets in each of three aspects of writing: the grammar of sentence construction; the punctuation of sentences; and the rhetoric of sentence revision. Each two-page exercise is preceded by two pages of explanatory material. A thirty-first exercise gives practice in meanings of words and in distinctions between literary and colloquial language—the latter a growing feature in new language textbooks in recognition of the widespread influence of the Leonard-Moffett study, Current English Usage.

The present edition is a practical and effective exercise book and shows great improvement over the 1927 edition of the same book. But whether it is sound policy to include in an exercise book for the uninform-ed so large a proportion of material on which usage itself is not uniform is a question of strategy in teaching.

C. T. L.

This collection of twenty-four plays produced in twelve European countries and America since the time of Ibsen is supplied with valuable introductory essays. The plays themselves represent a wide variety of modern social problems as well as of dramatic types. Thus, the author points out, The Wild Duck, The Father, Strife and The Silver Cord illustrate realism; The Weavers, The Cherry Orchard, The Lower Depths, and Juno and the Paycock, naturalism; Pelléas and Melisande, symbolism; The Hairy Ape and Liliom, expressionism; The Bonds of Interest, Liliom, and Six Characters in Search of an Author, fantasy; Cyrano de Bergerac and Elizabeth the Queen, romantic poetic plays; The Weavers and Riders to the Sea, tragedy; Our Betters and Biography, the comedy of manners; The Importance of Being Earnest, intellectual farce; The Red Robe and Strife, the thesis play; Mid-Channel, the “well-made” play; In Abraham’s Bosom, the folk drama; Six Characters in Search of an Author, The Lonely Way, and Hotel Universe, the psychoanalytical play.

California Test of Mental Maturity. Primary Battery, Grades 1-3; Elementary Battery, Grades 4-8. Devised by Elizabeth T. Sullivan, Willis W. Clark, and Ernest W. Tiegs. Los Angeles, Cal.: Southern California Book Depository. 1936. Specimen sets, primary and elementary, each 25 cents.

These tests propose to test the mental capacity of children in the elementary school. They are “designed to provide for a greater insight into the various mental traits, functions, or factors, than furnished by most group intelligence tests.” Like all tests of mental ability, these yield the mental age and intelligence quotient. There is also a high correlation between the results obtained from these tests and those gotten from the Binet tests.

M. L. S.
The club of 45 male voices was under the direction of Charles Troxell. This program included a burlesque operetta, "Romeo and Juliet," and was sponsored by the local Glee Club.

Searching the heavens for truth, knowledge, and inspiration, the Juniors appeared as star gazers on their third "birthday," February 19. The celebration was carried through under the leadership of the class officers: Ila Arrington, president; Virginia Turnes, vice-president; Dorothy Peyton, secretary; Virginia Blain, treasurer; Helen Hardy, business manager; and Isabel Russell, sergeant-at-arms.

Three members of the International Relations club attended the annual convention of the Southeastern International Relations Club conference, held at Alabama Polytechnic Institute February 18, 19, and 20. The Harrisonburg representatives were Mrs. Mary Darst, Hazel Koontz, and Louise Faulconer.

The debating club closed its season after three intercollegiate matches. Helen Puliham and Mary Clark represented Harrisonburg in the first debate with the University of South Carolina; Agnes Bargh and Margaret Smiley in the return debate at Columbia, S. C. The decision was against Harrisonburg in the first debate; the match at Columbia was of the "no-decision" type. There was no decision given in the third debate, that with Farmville State Teachers College, held here, the local club being represented by Helen Shular and Helen Hotch.

Chapel programs for the past four weeks have included many speakers from the college faculty, several programs by student organizations, and other features. On February 10 the speaker was Rev. J. B. Hill, Richmond, state secretary of the Baptist Sunday Schools and student work.

A motion picture of the Shenandoah National Park was presented at the assembly period on February 24 through the courtesy of the National Park Service.

Professor R. C. Dingledine discussed the President's message to Congress concerning proposed changes in the judiciary, and the General Motors "sit-down" strike; Dr. O. F. Frederikson discussed the economic situation in relation to world peace; and Professor J. N. McIlwraith read parts of Washington's Farewell Address and pointed out the relation of certain parts of the first president's policies to present-day foreign policies.

Professor C. T. Logan reviewed Max Eastman's new book, "The Enjoyment of Laughter"; Dr. C. E. Normand described spots on the sun and told of their importance to man; and Professor J. Edgar Anderson gave an explanation of a symphony orchestra by describing and displaying musical instruments which make up a symphony, giving the number of each in a full orchestra and the part each plays in the entire performance.

Chosen by student body ballot, Ruth Mathews, Front Royal, was elected to serve as vice-president of the Student Government Association for the 1937-38 session. Elected at the same time were Helen Hardy, Amelia, vice-president of the Y. W. C. A.; Anita Wise, Mt. Vernon, N. Y.; vice-president of the Athletic Association; and Ila Arrington, Pembroke, and Jennie Spratley, Dendron, business manager of the Breeze and Schoolma'am, respectively.

Other minor officers elected for the coming session were as follows:

Student Government — Isabel Russell, Federalsburg, Md., secretary; Dorothy Peyton, Rhoadesville, recorder of points; and Sue Quinn, Richmond, editor of the Handbook.

Y. W. C. A.—Lafayette Carr, Galax, secretary; Wanda Spencer, Lynchburg, treasurer.

Athletic Association — Billie Powell, Hopewell, business manager; Evelyn Patterson, Washington, treasurer; and Letitia Holler, head cheer leader.

Other recent student elections have resulted in the following choices:
Lanier—Jane Logan, Harrisonburg, president; Agnes Arnold, Nassawadox, vice-president; Frances Wilkins, Strasburg, secretary; Carrie Roane, Cash, critic; Doris Hodges, Norfolk, sergeant-at-arms; Virginia Ramsey, Bassett, chairman of the program committee.

Lee—Lois Sloop, Harrisonburg, president; Eleanor McKnight, Cambridge, Md., vice-president; Leslie Purnell, Salisbury, Md., secretary; Virginia Rader, Maxwelton, chairman of the program committee; Alpine Beazley, Beaver Dam, sergeant-at-arms; and Helen Hardy, Amelia, critic.

Page—Adelaide Howser, Arlington, president; Mary Frances Taylor, Fairfield, vice-president; Eleanor Shorts, Harrisonburg, secretary; Ettie Henry, Lynchburg, treasurer; Mary Ellen McKarsie, chairman of the program committee, and Dorothea Nevils, Hopewell, critic.

Rural Life Club—Beverly Carper, Roanoke, president; Mary Land, South Hill, vice-president; Louise Hankla, Louisa, secretary; Virginia Shreckhise, Mt. Sidney, treasurer; Maria Bowman, Staunton, chairman of the program committee; and Christine Rose, Blue Spring Run, chairman of the social committee.

Louise Ellett, Jennings Ordinary, was elected president of the Junior council to fill the vacancy created by the resignation of Susan Quinn.

Members of the Standards Committee for the 1937-38 session who were recently appointed are Margaret Cockrell, Alexandria, chairman; Evelyn Vaughn, Greenwood, S. C.; LaFayette Carr, Galax; Anna Goode Turner, Suffolk; Olive Johnson, Carrsville; Hazel Blair, Gretna; Margaret Clark, Norfolk; Nancy Dixon, Winston-Salem, N. C.

The Stratford Dramatic Club and the Lanier, Lee, and Page Literary Societies initiated 32 new pledges during the past quarter. They were as follows:

Stratford — Patricia Minar, Arlington; Louise Ellett, Jennings Ordinary; Alice Gilliam, Prince George; Ellen Stanford, Norfolk.

Lanier — Virginia Becker, Petersburg; Kathleen Cowden, Gate City; Carrie Roane, Cash; Ethel Driver, Mt. Sidney; Doris Hodges, Norfolk; Marjorie Grubbs, Norfolk; Ellen Miner, Meridian, Miss.; Ann Thweat, Petersburg; and Frances Warren, South Hill.

Lee — Mary Catherine Lyne, Shenandoah Junction, W. Va.; Marguerite Bell, Suffolk; Marlin Pence, Arlington; Margaret Clark, Norfolk; Martha Ann Fitzgerald, Crewe; Geraldine Douglass, Grottoes; Nancy Dixon, Winston-Salem, N. C.; Leslie Purnell, Salisbury, Md.; Jean VanLandingham, Petersburg; and Ruth Schafer, Mt. Vernon, N. Y.

Page — Dorothy Anderson, Rustburg; Lottie Ayers, Antonia; Mildred Glass, De Witt; Virginia Gordon Hall, Ashland; Frances Lanier, Petersburg; Mary Ellen McKarsie, Alexandria; Catherine Minette, Petersburg; Eleanor Shorts, Harrisonburg; and Dorothy Lee Winstead, Norfolk.

Pledges to other organizations on campus were:

Choral Club—Alice Doss, Gretna; Leslie Purnell, Salisbury, Md.; Isabel Buckley, Rural Retreat; Cora Mae Fitzgerald, Portsmouth; Letitia Holler, Camden, N. J.; Doris Fivecoat, Portsmouth; and Betty Baumeister, Portsmouth.

Art Club—Helen McMillan, Harrisonburg; Anita Wise, Mt. Vernon, N. Y.; Kathryn Shull, Winchester; Betty Lou Mc Mahan, Sanford, N. C.; Virginia Becker, Petersburg; Eleanor Cole, Norfolk; and Dorothy Newman, Harrisonburg.

International Relations Club — Carrie Roane, Cash; Audrey Kilman, Jenkins Bridge; Alma Curtis, Spring Grove; Peggy Byer, Hagerstown, Md.; Emma Rand, Amelia; and Virginia McCue, Staunton.

Kappa Delta Pi—Agnes Bargh, Cape Charles; Peggy Byer, Hagerstown, Md.; Mary Ella Carr, Fairfax; Helen Hardy,
Amelia; Margaret Shank, Harrisonburg; Winifred Vickery, Rockaway Beach, N. Y.; and Annie Vincent, Midlothian.

**Sigma Phi Lambda** — Audrey Kilman, Jenkins Bridge; Jane Lynn, Manassas; Dorothy Sears, Appomattox; Jane Rosenberger, Winchester; Anna Miller, Aqua; Mike Lyne, Shenandoah Junction, W. Va.; Ellen Beery, Harrisonburg; Celia Ann Sprio, Harrisonburg; Geraldine Lillard, Madison; Nell Long, Richmond; and Marie Walker, Kilmarnock.

**Glee Club**—Nancy Dixon, Winston-Salem, N. C.; Patricia Stone, Staunton; Elizabeth Hickerson, Davis, W. Va.; and Nancy Elarman, Harrisonburg.

**ALUMNAE NEWS**

Home Coming has been announced for the week-end of March 19-21. Mary Brown Allgood, '30, of Richmond, will preside at meetings of the Alumnae Association on Saturday morning. Following the business meeting, there will be an open meeting at which an oil painting of our first president, Dr. Julian A. Burruss, will be presented to the college by Mrs. Harry E. Garber, of Harrisonburg, representing the Alumnae Association. Miss Elizabeth P. Cleveland of the faculty will accept the portrait on behalf of the college.

There have been many messages from alumnae who plan to be present. “Please do reserve me a place for the Home Coming week-end,” writes Hilda Hisey, '34, of Edinburg. “Since I still know a few students at school, I am particularly anxious to come back. Then it has been a whole year since I last saw most of the faculty.

“I remember the very first alumnae meeting I attended when so many of the ‘ex’s’ were speaking of the ‘boardwalk’ days. From all the news I can glean at odd moments I suppose we of the next period shall have to classify ourselves as of the ‘double-deck bed’ era. I do want to see the many changes and catch up with the progress the school is making.”

Other alumnae express regret, in which we join, that they cannot be present. Florence Fray, '25, Madison, Virginia, who has spent several years at Blue Ridge but is now able to be at home, writes, “The entire program for Home Coming sounds so very interesting and I should like to be with you. I am still taking a rather strict ‘cure,’ therefore I cannot attend Home Coming.”

From Brinkley, Arkansas, Phyllis Eastham Harrison, '21, writes, “I am so sorry that I cannot be with you all for the Home Coming. I do hope you will all have a grand time together on dear old Blue Stone Hill. Give my love to all my former instructors, friends, and classmates.”

Evelyn Wilson Gunter, '31, of Richmond, Virginia, sends this message. “I am dreadfully sorry that it will be an impossibility for me to attend Home Coming. However, my thoughts will certainly be with you and I trust that you will have a very successful meeting. Your program sounds excellent and I do hope that the weather is fine and that you have many girls back with you.”

Annie Spencer Sikes, '33, writes from Tuscaloosa, Alabama: “I regret that I shall not be able to be at H. T. C. for Home Coming. I don’t know of anything that would give me more pleasure than a visit; and hope that some day this will be a realization.”

Marguerite Bristow, '36, writes, “Last Friday afternoon when I arrived home for the week-end your letter was awaiting me. It was indeed a very delightful invitation and one which I would be overjoyed to accept. Just at this time it will be impossible for me to visit the college, much as I would like to do so. My sincerest hope is that there will be a great reunion and my thoughts will be with you during this time. May it be the very best ever!”

**OUR CONTRIBUTORS**

ARTHUR BEVAN is State Geologist, and director of the Virginia Geological Survey, a division of the State Commission on Conservation and Development.

PAUL HOUNCHELL is assistant director of the Training School and professor of education in the State Teachers College at Harrisonburg.
Progressive teachers will find dependable advice in these estimates on current film releases.

Recognizing that one man’s meat may be another man’s poison, the National Committee on Current Theatrical Films gives three ratings: A, for discriminating adults; Y, for youth; and C, for children. These estimates are published by special arrangement with The Educational Screen, Chicago.

**GREEN LIGHT** (Errol Flynn, Anita Louise) (1st Nat.) Lloyd Douglas’ novel finely done. Thoughtful story emphasizing power of faith. Young surgeon, whose career is interrupted when he takes blame for unsuccessful operation, and others influenced by philosophy of fine old minister. Spiritual theme but not preachy.

(A) Interesting (Y) Good (C) Beyond them

**LAST ROSE** (Ufa) (German dialog, English titles, laid in England) The opera Martha freely transformed into human and amusing story of rural life, accurately set and costume, moving and attractive characters, by Tibbett’s glorious voice. Amusing comedy roles.

(A) Good (Y) Fairly good (C) Doubtful interest

**LET’S MAKE A MILLION** (E. E. Horton) (Para.) Rural store-keeper hero plans to marry on his soldier bonus, but his two home-making old aunts oppose. Oil-promotion crooks get the money, and his friend’s money too, but lively developments bring happy ending for all concerned.

(A) Fair (Y) Good (C) Pro. good


(A) Fair (Y) Good (C) Too strong

**ON THE AVENUE** (Dick Powell, Madeleine Carroll) (Fox) Gay musical review with striking settings, song-and-dance numbers, and Ritz Bros. noisy antics as background for wildly farcical situations, but much laughable nonsense growing out of producer-actor’s romance with wealthy heiress. A few crudities.

(A) Fairly amusing. (Y) Amusing (C) Prob. good

**SEA DEVILS** (McLaglen, P. Foster, Ida Lupino) (RKO) Bombastic thriller of roughneck rivalry, with sodden drinking, saloon love, ponderous conceit, boorish wise-cracking, incessant fighting over colorless heroine. Thick with absurdity and offered as “tribute” to the Coast Guard. (A) Depends on taste (Y) Better Not (C) No

**YOU ONLY LIVE ONCE** (Henry Fonda, Sylvia Sidney) (UA) High tension tragedy of young three-jail-term hero and devoted heroine in harrowing race from law which wants him for brutal murder. Supposedly shows injustice of social order. Really morbid thriller of mawkish appeal to misdirected sympathy.

(A) Grim (Y-C) Unwholesome

**UNDER YOUR SPELL** (Lawrence Tibbett) (Fox) Famous tenor flies from arduous life to ranch and when spoiled society girl follows to bring him back to fulfill contract merry complications occur. Thin, inconsequential story distinguished chiefly by Tibbett’s glorious voice. Amusing comedy roles.

(A) Depends on taste (Y-C) Good if it interests
THE VIRGINIA TEACHER

Bibliographical Directories under the editorship of J. McKeen Cattell, editor of “School and Society” and of “Science”

LEADERS IN EDUCATION
1,037 pages Over 11,000 biographies $10

AMERICAN MEN OF SCIENCE
1,278 pages Over 11,000 biographies $12

THE SCIENCE PRESS
Grand Central Terminal New York, N. Y.

JOS. NEY & SONS CO.
THE BEST DEPARTMENT STORE
IN HARRISONBURG, VIRGINIA

BURKE AND PRICE
FIRE INSURANCE
AUTO INSURANCE
Phone 16

VIRGINIA TEACHERS
Can keep up with the new books in their fields by reading the monthly book reviews
IN
THE VIRGINIA TEACHER
HARRISONBURG, VIRGINIA

9 issues each year........ $1.50

A FOOD
AND AN
ENERGY BUILDER

IMPERIAL
THE CREAM ICE CREAMS
Manufactured in Harrisonburg, Virginia and sold by all leading Ice Cream dealers throughout the Shenandoah Valley

WEBSTER’S NEW INTERNATIONAL DICTIONARY Second Edition
500,000 Entries — 122,000 Not Found In Any Other Dictionary
Thousands of New Words (12,000 Terms Illustrated) Magnificent Plates in Color and Half Tone
Thousands of Encyclopedia Articles
555,000 Geographical Entries
15,000 Biographical Entries
$1000 Valuable Tables 12350 Pages
At Bookstores Or Write For Pamphlet
G. & C. Merriam Co.
Springfield, Mass.
THE VIRGINIA TEACHER

THE STATE TEACHERS COLLEGE
HARRISONBURG, VIRGINIA

MEMBER SOUTHERN ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS
CLASS "A" MEMBER AMERICAN ASSOCIATION OF TEACHERS COLLEGES

Established by the General Assembly 1908.
Annual enrolment, 1,300.
Faculty of 60 well-trained and experienced college teachers.
Located in the Shenandoah Valley.
Elevation 1,300 feet.
Campus of 60 acres.
Beautiful mountain environment.
Seventeen college buildings.
Total value college plant, $1,600,000.
Both city and rural training schools.
Athletic field and tennis courts.
Two gymnasiums. Nine-hole golf course.
Two swimming pools (indoor and outdoor).
College camp on Shenandoah River.

Harrisonburg is a progressive little city, delightful to live in; its 7,000 inhabitants—people of culture and refinement—are deeply interested in the welfare of the college and its students.

APPLY TO THE PRESIDENT

THE McCLURE CO., INC. . PRINTERS . . STAUNTON, VA.