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Back To Basics . . . Did Vo Ag Ever Leave Them? By George Wardlow

Educators seem to be getting plenty of attention lately. At least two dozen national studies have investigated the current state of American education. Education has been studied, investigated, discussed and cussed to the point where one would think that somehow, somewhere, someone could make sense of it all. We are the constant targets of such loaded phrases as: "Get back to the basics!", "Make it hi-tech!", and "Prove that your program has value—the higher degree, that is!" What does it all mean?

Teachers are by nature a defensive lot. Our kingdoms are our classrooms. We generally resist outside intervention into our daily teaching. After all, who better knows my situation, my students, my subject matter and my community than me? However, the studies suggest that education needs to "get back to the basics." So what are "the basics"? National studies suggest that the basics include more reading, more language and literature, more math, and the new "basic", hi-tech computer use.

An even more important question to address before we "get back to basics" is, "Are we sure we ever left the basics?" Vocational agriculture and agricultural education, should attempt to answer this question. We in agricultural education must first determine that the concern afforded all of education is concern for vocational agriculture as well. Vocational agriculture is an important part of the whole educational system. We must insure that the "excellence" which the American public seeks and supports does exist in our programs.

Vocational Agriculture has had an illustrious past, one in which we should take pride. However an illustrious past does not give license to hide from the public concerns for quality and excellence in the present and future. We must have "quality" programs of vocational agriculture, or we will have none. This new found interest in education in America is an excellent chance for making a good program even better. If we can continue to provide programs of vocational agriculture which are examples of the excellence the public seeks, then a future as illustrious as our past is insured.

How does one define "excellence" and "quality" and how are we to know if vocational agricultural programs are of excellence and quality? Since politicians *support* excellence and quality; school administrators *evaluate* teachers in terms of them; and teachers are supposed to *be* of excellence and quality, identifying the indicators of quality is an important task. In determining the indicators of these terms we would do well to first review the historical perspectives of agricultural education.

The components which, historically, gave strength to our programs may now serve as the same good foundation on which future excellence in vocational agriculture can be built. Vocational agriculture succeeded in the public schools because it provided a unique combination of educational experience. Vocational agriculture succeeded because:

- It provided a useful education rooted in the practical application of knowledge and skills to the needs of its clientele.
- It allowed for the direct implementation of newly acquired knowledge and skills under the supervision of the instructor through supervised occupational experiences.
- It provided a vehicle for students to develop and practice leadership skills.
- It helped students develop what may be the single most important skill that all of education can give to our youth — the ability to analyze situations and solve problems.

As a bonus, while performing these important educational tasks, vocational agriculture programs became important public relations tools for many schools.

In our quest for excellence in vocational agriculture we must examine the worthiness of the time-tested components from yesterday. No vocational agriculture program, and indeed no other vocational program, can survive for long without meeting the needs of its clientele. Today's agricultural youth, whether they be from the most rural community or the center of the most urban area, need relevant instruction and practical application of skills. This is basic to our program. Agricultural education must offer instruction based on the needed skills and

knowledge of the community instead of designing programs which are based solely on the skills and knowledge of the instructor.

One of the most unique facets of vocational agriculture since its very inception has been the philosophy that acquired knowledge and skills are best retained and subsequently used when they are reinforced through practice. The concept that newly learned skills should be directly applied and practiced at home was honed to a fine edge through supervised occupational experience. How can vocational agriculture maintain the excellence of our past if even one student of vocational agriculture does not have this opportunity? How can we continue to maintain our unique identity from other education programs if we cannot maintain the things which made us most unique?

As our communities grow, as our society becomes more complex, as according to Naisbitt (1982) we become an "information society", the need for leadership at all levels of public and private life becomes more acute. Through the Future Farmers of America and its activities, vocational agriculture has for more than a half of a century been in the business of allowing any and all of its students to develop their leadership abilities. These individuals have used these skills at the smallest of community meetings and in the highest of national offices. Other educational programs such as Business and Office Education and Industrial Education have borrowed from this idea of a "co-curricular" or "intra-curricular" leadership organization. How can we as educators not encourage, with all the zeal we can muster, all students to participate in this opportunity? If any of us do not we can rightly be accused of ignoring one of the indicators of a high quality vocational agriculture program.

Our society has become increasingly interested in "hi-tech" and concerned that all students should become "computer literate". What does this mean? Is it the ability to use a keyboard? The ability to communicate in "computerese"? Or is it the ability to apply simple logic to complex problems in an effort to seek appropriate solutions? Few would deny the need for everyone to become familiar with the tools of the times. It could be said, however, that the emphasis on computer high tech is a manifestation of what vocational agriculture has been attempting to do for many years: teach problem solving skills.

Analyses of effective vocational agriculture programs show all of these components to be present and active. But there is an additional component: effective and high quality teaching. Quality programs must be built around quality teaching. How do we determine quality teaching? Many research studies have sought to define or explain the complex relationships which exist between student and teacher in the classroom. Many researchers and educators have suggested that the complexity of classroom discourse precludes an answer to the question "What is quality teaching?"

But the fact that quality in teaching is a highly

complex series of interactions, as yet undetermined or explained, should not prevent us from seeking these truths. Perhaps all educators should strive to seek the solution themselves rather than wait for others to determine it for them. Several years ago Rosenshine and Furst (1971) developed a list of teacher process variables which showed some consistency in appearance in educational research. Since that time additional research has been done on several of these factors to determine their relationships with student performance. It would seem that these variables are of relevance to effective teaching today. A brief review of these follows.

1. **Teacher clarity.** The cognitive clarity of the teachers presentation was found to be the most promising teacher-effects variable. Research has shown that at least four dimensions of teacher clarity exist. Clear teachers were found to:

- Stress the important aspects of course content by repeating important points, by writing out important things for visual reinforcement, and by summarizing the material well.
- Explain specific aspects of instructional content through the use of written, verbal or practical examples.
- Promote student assimilation and synthesis of instructional content by explaining the unfamiliar and then pausing to allow students time to think, by explaining similarities and differences in things, by showing students how to remember things, and by reviewing what has already been taught.
- Assess and try to understand student understanding of instructional content by asking questions, examining student work, allowing for student questions and providing answers, repeating things when necessary and providing time for student practice (Hines, et al, undated).

These points appear obvious to any teacher, but one wonders how many teachers make themselves consciously aware of them as they teach. All teachers should attempt to incorporate these factors into their teaching.

2. **Teacher Variability.** The teacher's use of variety or variability during the lesson was identified as a promising variable. Studies on variability indicate that student achievement is positively related to classrooms where a variety of instructional procedures and materials is provided, and where the teacher varies the cognitive level of discourse and student tasks. The very subject matter of vocational agriculture would seem to be an asset in assisting in teacher variability. Few other academic areas have the opportunity for such a diverse use of teaching methods, materials and procedures. Vocational agriculture with mechanics shops, farm tours, leadership contests, laboratories in the classrooms and community offer a smorgas-

bord for capitalizing on the variability found in quality programs.

3. **Teacher Enthusiasm.** Studies have found significant relationships between teacher enthusiasm and student achievement. Teacher movement, gesture and voice inflection comprise at least a part of the enthusiasm quality. With the mounting pressure from the public over concern for education, sometimes inadequate financial reward and other stress factors, it can be difficult to maintain the zeal for teaching. The students' preceptions of the teacher's enthusiasm may affect their attitudes toward the education process and alternately the students level of achievement. Another important consideration is that vocational agriculture teachers are the primary recruiters for their profession. How can they better support their profession than by serving as a positive role models for their best students who may follow them as teachers of agriculture?

4. **Task-Oriented and/or Businesslike Behavior.** Rosenshine and Furst suggested the degree to which a teacher is task-oriented, achievement-oriented, and/or businesslike is an important factor. They suggest that in the best classrooms teachers encourage students to attend to the task at hand. These teachers maintain efficient and business-like order within the classroom. However undisciplined many students appear, most thrive on order in a daily routine. Conducting vocational agriculture in a non-sense, business-like environment is essential to program quality.

5. **Student Opportunity to Learn Criteria Materials.** Several studies have found significant positive correlations between student opportunity to learn and student achievement. While this factor seems self-evident, good teachers are consciously aware of this factor during the teaching process. Vocational agriculture lends itself to support this quality attribute with in-class instruction followed by reinforcement through practical application during the supervised occupational experience component of the program.

Rosenshine and Furst identified several other variables which they considered important but to lesser degrees. These are:

- Use of student ideas and general indirectness.
- Criticism or its absence.
- Use of structuring comments.
- The use of higher cognitive versus lower cognitive questions.
- Probing for student responses.
- The level of difficulty of discussion.

Teachers should review these key points in quality education in an effort to determine their level of use. While the implementation of these techniques does not insure successful quality programs, their disuse will surely be evident in unsuccessful programs.

Current interest in increasing standards for graduation requires that vocational agriculture remain competitive on the secondary school

level. As additional units are required for high school graduation, vocational agriculture must compete for student time. Vocational agriculture programs of excellence will remain strong if they continue to offer education relevant to their communities and their students. High quality teachers will continue to capitalize on peoples' interest in agriculture and offer programs of high quality. Programs which cannot make this claim will not survive.

A distinguished colleague at the University of Minnesota (Peterson-1984) suggests that there may be no such thing as a mediocre program of vocational agriculture. Programs are either "excellent" or they are "poor"; teachers either do a good job in offering the types of programs needed or they do not. He further suggests that vocational agriculture programs are either "good" or they are "out of business" as the poor ones will not survive the competition with new requirements.

Vocational agriculture has enjoyed a rich past. The same future can be assured only if each instructor of vocational agriculture assumes responsibility for his or her program and profession. Society will not remember how great we were, they will only recognize how great we are. Excellence in education is a challenge. To meet the challenge we need not abandon what and where we have been but rather build upon and maintain the components of quality programs which have always been our foundation and strength. The key is simple. We must offer programs which have relevance to community needs. We must provide opportunities for our students to apply, under proper supervision, what they have learned. We must assist each student to develop his or her leadership potential according to their own abilities. We must guide each student through the process of identifying problems, analyzing situations and seeking solutions.

All of these components of quality vocational agriculture programs are determinants of excellence. None, however, can be done without quality teaching. The teacher remains the single most important variable in formal education and there is no substitute for quality. Programs of excellence demand excellent teachers. Each of us as teachers must continue to strive toward our own excellence.

The author welcomes any comments directed toward this article.

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