RESEARCH ARTICLE

USAGE OF TEACHING AIDS AND TEACHING METHODS BY THE TEACHERS OF AGRICULTURAL COLLEGE, BAPATLA.

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Abstract
Agricultural College, Bapatla, AP, was purposively selected out of the six Agricultural Colleges in ANGRAU to know the opinions of teachers towards the Model Class Room. The study was conducted by adopting the Ex - post - facto research design. The respondents for the study include all teachers (56) on rolls as on the date of study in the selected campus. The findings of the study revealed that majority of the respondent Teachers had neutral opinion towards usage of Teaching aids and Teaching methods.

Introduction:-
Teaching aids assist students in learning. These aids consist of video, audio and hands-on tools to help involve the students and enhance the learning experience. Teachers begin using visual, audio and hands-on aids as early as preschool. Teaching aids can be as basic as a blackboard or whiteboard. Audio and visual equipment, such as DVD players and video projectors, are commonly used as tools for learning with a very effective output. Students tend to get more involved when learning if teaching aids are implemented into the curriculum. Hands-on aids, such as computers, maps and other tools that require some sort of interaction from the students, have the highest levels of effectiveness. The tools are designed to involve the students, promote interaction, and promote faster learning and better comprehension. Being able to see, hear or get involved in a topic creates a much better method for learning. How a teacher chooses to use learning aids in a classroom can vary dramatically. The main factor in the effective use of teaching aids is that a skilled teacher is behind the tools being used.

A teaching method comprises the principles and methods used for instruction to be implemented by teachers to achieve the desired learning or memorization by students. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. The purpose of education is to promote all round development of the learners and bring about desirable changes in their behaviour and agriculture education is not an exception. The basic objective of teaching is to create the learning situation in which the learning takes place automatically. In fact, teaching and learning are the two sides of the same coin. It involves five Elements i. e., Learner, Teacher, Subject Matter, Teaching Materials and Physical facilities. Since, in the Present day Education, the Teacher, and Learners highly organized, every effort is made to collect the opinions of teachers on the remaining three elements i.e., Subject Matter, Teaching Materials and Physical facilities.

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Materials and Methods:
The present Study was conducted by adopting Ex Post Facto Research Design. by selecting Agricultural College; Bapatla purposively out of the six Agricultural Colleges in ANGRAU, Andhra Pradesh as it is the oldest College with supposed to be well experienced faculty and required infrastructural facilities. All the 56 Teachers (15 Professors, 20 Associate Professors, and 21 Assistant Professors). Frequency (f) and Percentages (%) were used for statistical analysis.

Results and Discussion:
Teaching aids supplement the teacher in delivering teaching effectively.

Teaching aids are devices, which help teacher to provide effective learning, which could begin with first hand, concrete experience and proceed towards more abstract experiences.

The respondent teachers were categorized taking into consideration of mean and standard deviation into low, medium and high on extent of use of teaching aids. The results are presented in Table 1 & Fig 1.

Table 1: Distribution of respondent teachers according to their extent of use of teaching aids. (N₁ = 56)

| S.No. | Opinion Category | Teachers |
|-------|------------------|----------|
|       | Frequency        | Percentage |
| 1.    | Low (upto 21)    | 4        | 7.14 |
| 2.    | Medium (22 – 29) | 42       | 75   |
| 3.    | High (30 and above) | 10       | 17.86 |

It was obvious from Table 1 that majority of respondent teachers (75%) fell in medium category followed by 17.86 per cent high category and 7.14 per cent low category.

Teaching aids supplement the teacher in delivering instruction effectively. It can be observed from Table 2 that O.H.P transparencies (42.85%), charts (42.85%) were always used teaching aids in classroom by the respondent teachers followed by specimens (10.71%), flannel graphs (5.35%), and real objects (1.78%).

Frequency used teaching aids by respondent teachers include charts (44.65%), O.H.P transparencies (33.92%), power point slides (32.4%), real objects (32.4%) and specimens (32.4%).

Occasionally used teaching aids includes models and mock – ups (46.42%), specimens (44.65%), video programmes (39.28%), power point slide (32.14%), real objects (28.57%) and flannel graphs (14.28%).
Table 2:- Distribution of respondent teachers based on use of teaching aids.

(N₁ = 56)

| S.No. | Teaching Aids       | Response Category | \( F \) | \( \% \) | \( F \) | \( \% \) | \( F \) | \( \% \) | \( F \) | \( \% \) |
|-------|---------------------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|
|       |                     | Never             | Rarely | Occasionally | Frequent | Always |        |        |        |        |
| 1.    | Charts              | ---               | ---    | 7       | 12.5   | 25     | 44.65  | 24     | 42.85  |
| 2.    | Flannel graphs      | 2                 | 3.57   | 42      | 75     | 8      | 14.28  | 1      | 1.78   | 3      | 5.35   |
| 3.    | Slides              |                   | 3      | 5.35   | 46     | 82.14  | 3      | 5.35   | 4      | 7.14   |
|       | a) Manual operated slides |           |        |        |        |        |        |        |        |        |
|       | b) Power point slides | 13             | 23.21  | 7      | 12.5   | 18     | 32.14  | 18     | 32.14  |
| 4.    | OHP transparencies  | 5                 | 8.92   | 5      | 8.92   | 3      | 5.35   | 19     | 33.92  |
| 5.    | Video programmes    | 3                 | 5.35   | 29     | 51.78  | 22     | 39.28  | 2      | 3.57   |
| 6.    | Real objects        | 6                 | 10.71  | 15     | 26.78  | 16     | 28.57  | 18     | 32.4   |
| 7.    | Specimens           | 1                 | 1.78   | 6      | 10.71  | 25     | 44.65  | 18     | 32.4   | 6      | 10.71  |
| 8.    | Model and Mock-ups  | 7                 | 12.5   | 23     | 41.07  | 26     | 46.42  | ---    | ---    | ---    | ---    |

\( F \) = Frequency, \( \% \) = Percentage

Rarely used teaching aids were manual operated slides (82.14%), flannel graphs (75%), video programmes (51.78%), model and mock – ups (41.07%) and power point slides (12.5%).

Slides with power point presentation (23.21%), model & mock – ups (12.5%), real objects (10.71%), O.H.P transparencies (8.92%) and video programmes (5.35%) were found in the category of rarely used teaching aids by respondent teachers.

The possible reason for using charts and overhead transparencies always by the teachers because they can be prepared by themselves without depending on others and is convenient to use never used power point slides, model and mark ups, real objects, video programmes, flannel graphs which are far more effective. This might be due to lack of necessary infrastructure in classroom situation. The above observation emphasize the need to equip with above said teaching aids to encourage the teacher to teach effectively. Rajani ghadekar and Asha (1993)
recommended that use of teaching aids should be encourage at college level for the better understanding of the subject matter.

**Use of teaching methods**

The respondent teachers were distributed taking into consideration of mean and standard deviation into low, medium and high on extent of use of teaching methods. The results are presented in Table 3.

**Table 3 : Distribution of respondent teachers according to their extent of use of teaching methods.**

| S.No. | Category           | Teachers | Percentage |
|-------|--------------------|----------|-------------|
| 1.    | Low (upto 33)      | 10       | 17.86       |
| 2.    | Medium (34 – 41)   | 36       | 64.28       |
| 3.    | High (42 and above)| 10       | 17.86       |

It was obvious from Table 3 and Fig 2 that higher proportion of respondent teachers (64.28%) fell in medium category followed by 17.86 per cent high category and 17.86 per cent low category.

**Table 4:- Distribution of respondent teachers based on use of teaching methods.**

| S.No. | Teaching Methods      | Response Category | Frequency | Percentage |
|-------|-----------------------|-------------------|-----------|------------|
| 1.    | Lecture               | Never             | 2         | 3.58       | 16         | 28.57     | 36         | 64.29     |
| 2.    | Discussion            | Rarely            | 2         | 3.58       | 7          | 12.5      | 21         | 37.5      | 19         | 33.92     |
| 3.    | Demonstration         | Occasionally      | 2         | 3.58       | 3          | 5.35      | 21         | 37.5      | 30         | 53.57     |
| 4.    | Brain harvesting (Brain-storming) | Frequently | 6         | 10.72      | 14         | 25        | 23         | 41.07     | 13         | 23.21     |
| 5.    | Role play             | Always            | 2         | 3.58       | 25         | 44.65     | 19         | 33.92     | 10         | 17.85     |
| 6.    | Case method           | Never             | 16        | 28.57      | 11         | 19.64     | 27         | 48.22     | 2          | 3.57      |
| 7.    | Workshops             | Rarely            | 6         | 10.71      | 7          | 12.5      | 24         | 42.87     | 19         | 33.92     |
| 8.    | Exercise (simulated experience) | Occasionally | 6         | 10.71      | 22         | 39.28     | 20         | 35.71     | 5          | 8.95      |
| 9.    | Colloquy              | Frequently         | 16        | 28.57      | 17         | 30.35     | 9          | 16.09     | 14         | 25        |
| 10.   | Field visit           | Always             | 7         | 12.5       | 18         | 32.14     | 18         | 32.14     | 13         | 23.22     |

F = Frequency,   % = Percentage

It was evident from Table 4 that large proportion of respondent teachers used lecture method (64.29%) always in classroom teaching while 53.57% used demonstration method followed by 33.92% discussion and workshops.

Among the frequently used teaching methods include case method (48.22%) followed by workshops (42.87%), brainstorming (41.07%), demonstration (37.5%), discussion (37.5%), exercise (35.71%) respectively were prominently used methods.

Role play (44.65%), exercise (39.28%), field visit (32.14%), colloquy (30.35%) and brainstorming (25%) methods were found occasionally used instruction methods by respondent teachers.

Rarely used teaching methods include case method (28.57%), colloquy (28.57%), discussion (12.5%), field visit (12.5%), brainstorming, workshops exercise method were equally distributed (10.71%).

Exercise (5.35%), discussion (3.58%) were found in never used category by respondent teachers.

Academic excellence is mainly dependent on the quality of instruction. There is a need to pay an attention to develop suitable method of teaching. The probable reason for the said findings may be because of their suitability and familiarity with the teacher. But, the other teaching methods could not be used due to lack of sufficient time,
large class size. These methods used by the respondents require only preparation of the subject matter with the help of available books and other sources of literature and presentation as one way flow of information to the thoughts. It is easy method of presentation and do not require any assistance from others. Case study, brainstorming and role play require lot of time and special skill to perform in the classroom and hence these were not used by teachers. It is in line with the findings of Mishra (1990).

![Graph showing distribution of respondent teachers according to their extent of use of teaching methods.]

**Fig 2:** Distribution of respondent teachers according to their extent of use of teaching methods.

**Review of Literature:**
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