CONTINUING EDUCATION INSTRUCTION VIA THE MASS MEDIA *

Jack C. Everly

University of Illinois

A basic assumption of this study has been that a great deal more knowledge exists about conducting continuing education via the mass media than is comprehended. This knowledge is tied up in the actual experiences of those institutions which have conducted such efforts. This reservoir was tapped and the implications are tentatively submitted here. No claims are made that this ushers in a new millennium of understanding regarding the use of mass media for continuing education instruction. However, this overview should help educators to place the mass media in a meaningful context when considering it for continuing education instruction.

General Implications

With 1,244 course offerings and 1,685,058 participants between January, 1962, and July, 1967, a beginning has been made in the use of mass media as a tool for continuing education instruction. These efforts involved at least 164 separate institutions in 44 states plus national and regional endeavors. Trends indicate a further growth potential with adequate staffing and financial resources. However, if something were to happen tomorrow to wipe out all continuing education instruction via the mass media the main institutions of continuing education would hardly know it were gone. It took half of a century before correspondence courses became a significant part of continuing education. Because of the present substantial number of "early adopters," mass media may be adopted as a vital tool of continuing education instruction much faster than correspondence courses.

The educator using continuing education instruction via the mass media is more and more coming to recognize that he is a communicator,

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an important participant in the emerging world laced with the mass media—a world in which the lines between television, radio, newspapers, magazines, and direct mail are becoming blurred and the task, rather than the tool dictates in what combination the growing number of devices will be employed. This was brought out by institutions reporting use of FM radio with television to accomplish feedback for a particular educational objective, or the use of correspondence courses with television or radio for a more complete learning experience. As they become merged in the continuing education process, the devices are losing their identity. The educational resources, which include the mass media, must be matched to the educational needs, not the needs to the resources.

Not pinned down by tradition, use of the mass media allows more innovation, permitting flexibility in planning to meet the needs of participants. With no pat formula, there obviously are more failures. But progress has been made because of such failures.

A major problem encountered during this period is the one of quality. The National Center for School and College Television finds that seven of ten telecourses it screens are judged unsuitable, and that only 9 per cent of those auditioned for the library are considered adequate for immediate national distribution. An acronym borrowed from the computer science field explains the predicament. "GIGO" is short for "garbage in, garbage out." GIGO refers to the fact that if a programmer feeds poor information into a computer, poor information is poured out with fantastic speed and volume. A similar analogy can be made with continuing education instruction via the mass media. If an educator feeds poor quality continuing education instruction into the mass media, poor quality continuing education instruction is going to become available rapidly and simultaneously for a multitude of participants. Mass media are devices which are too costly to maintain and too valuable as tools for continuing education to be used as a pipeline for garbage. Mass media have made public what has prevailed relatively unnoticed in continuing education previously—mediocrity in teaching. This disdain for the mediocrity of much that appears today via the mass media should be directed at the educator who can control this quality, not directed toward his tool which has no control over what is fed through it as continuing education instruction.

The mere availability of subject matter is not a sufficient cause for participation. With more than two-thirds of the course offerings falling under the major subject matter category of general education, they attracted less than one-fifth of the reported participants. Only humanities and languages remained in the top ten subject matter areas.
Participation in continuing education instruction is skewed toward the utilitarian viewpoint. Inservice professional education takes a commanding lead with 36.7 per cent of the participants. When inservice vocational education was included, approximately one of every two participants was involved in continuing education instruction via the mass media as a part of his profession or vocation. This would suggest that participants favor professional-centered or vocational-centered continuing education instruction via the mass media. Institutions which have responsibilities in postgraduate professional education have a highly educated clientele that wants more education so that they may keep their knowledge current. The opportunities here for innovation and creative teaching via the mass media appear limitless.

The most common suggestion for improvement of present course offerings was to increase the involvement of the participants. Other findings cited in the study support the view that the need for interaction varies according to the participant's identified goals. The more specific the goal and the more highly motivated the learner, the less the need for interaction. The nature of the educational objective should indicate to an institution how far it should attempt to stretch meager finances to achieve additional involvement through direct communication between participant and instructor. Additional research in this area of participant involvement is needed.

One of every ten course offerings was supported entirely by income from the course offering. Although the majority of participants were enrolled in course offerings with no fee, several successful course offerings charged enough fee to cover their costs. The difficulty in collecting a fee when it is broadcast must be recognized, but it should not be ruled out if supplementary materials are needed. Except for low income groups, participants have been willing to pay.

Devices

Television is the most widely used device of the mass media extending what a single instructor of continuing education is able to communicate rapidly and simultaneously to many participants. A broad spectrum of subject matter has been disseminated via television, using a variety of individual, group and community methods to achieve various purposes of acquiring information and skill or of applying knowledge. Experience shows television is not the ultimate device, but it works well in concert with other devices and ways to involve the participant in the learning activity.

It is possible to conduct course offerings for both academic and nonacademic credit participants via television. Although declining in relative importance when compared with the number of course offerings for noncredit only, it still provides an educational opportunity for an increasing number of participants. Television for academic and
nonacademic participants should not be overlooked by those institutions which can adopt the Chicago TV College pattern of enrollment.

Noncredit television course offerings appear to be in vogue involving 19 of every 20 participants according to the survey. This type of course offering is more flexible than the other types in meeting the needs of participants and can be offered by many different types of institutions. As measured by the number of course offerings and participants, this type of endeavor will continue to increase.

With an apparent relationship between type of subject matter presented and the type of station which airs it, institutions may plan subject matter to fit the media. A majority of the general education subjects were aired over commercial television stations. Medicine provides a direct contrast with 99.9 per cent of its air time provided by educational television stations. Educational television provides better than 86 per cent of the time for inservice professional education as well as for community and national development. Two-thirds of the time for inservice organization and public health, safety and civil defense was provided by commercial television.

The average cost of a course offering via television was $12,568 with an average participant cost of $13.15. These figures should be used with caution, but they do provide a guide as to the cost of production. The participant cost can be lowered most effectively by increasing the number of participants rather than by trying to cut the cost of producing a course offering.

Approximately one-half of the course offerings and 96.5 per cent of the participants via radio were in the inservice professional education category. This experience indicates that radio can be an effective tool in providing inservice education for the professions, such as teachers, lawyers, doctors, nurses and veterinarians...audiences limited in size but unlimited in their need to continue their learning in order to perform their chosen task for society.

Networks of continuing education instruction can be developed via the radio covering large geographical areas. An example is the 100,000 square mile radio campus of the Albany Medical College which covers parts of seven states in the northeast. For successful interaction between the small groups and the instructor in such a network, the number of groups should not exceed 12. To cover large geographical areas, several networks can be established using the same course offering on different days of the week.
Since 1964 educational FM has had a 25 per cent increase or more in course offerings each year and a similar increase in the amount of broadcast hours allocated to continuing education instruction. If this growth pattern continues, the majority of radio efforts will be via educational FM by 1969, if not earlier. Much of this would hinge on the approval of the proposed licenses for the stations in the educational FM networks now on the drawing boards.

According to the survey, 91,684 of the 98,980 participants for radio had direct communications with the instructor. This indicates how far continuing education instruction via radio has proceeded to develop two-way communications. Where there is need for a dialogue between the participant and the instructor the two-way radio conference provides a feasible feedback system.

Average cost for each course offering by radio was $31,313 with an average participant cost of $25.86 as computed from 30 of the 92 course offerings for which costs were reported. This indicates that continuing education instruction via radio cannot be financed on a shoe-string. It also indicates that funds will be allocated by society for continuing education instruction via the mass media if they are performing a vital role.

Of the printed media, magazines involved the largest number of participants, nearly one-half million, ranking immediately after television as a major device for continuing education instruction. Already conveyors of information and advertising to highly specialized audiences, some magazines are readily adaptable to techniques providing the opportunity for structured learning from their pages. Creative approaches to the use of magazines for structured learning will benefit the medium, the participant and the institution of continuing education. Although access to the pages of a magazine may at first be limited, successful application by a few would change this picture in a hurry.

The survey was inconclusive regarding the use of newspapers or direct mail for continuing education instruction.

Methods

Since method is the relationship established by the continuing education institution with the participants for the purpose of systematically diffusing knowledge, the choice of method by the institution affects the very nature of continuing education instruction via the mass media. Individual methods were chosen most often by the 184 institutions in the study. In fact, 873 of the 1,244 course offerings used individual methods. More than one-fourth of the course offerings were open to groups.
Approximately one-eighth of the course offerings were limited to group methods and less than 1 per cent of the course offerings employed community methods. The availability of course offerings employing a particular method coincided with the number of participants involved. For example, 70.2 per cent of the course offerings used individual methods to reach 66.3 per cent of the participants, while 16.7 per cent of the course offerings used individual-group methods to instruct 15.5 per cent of the participants. This implies that institutions have chosen methods which have maintained a balance between availability and participation.

Use of methods varied according to subject matter and medium. The most available subject matter, humanities, was taught with mostly individual methods. In contrast, group methods were used for the majority of course offerings on medicine.

Individual methods dominated the course offerings by television, which involved the largest number of participants. Television also had the largest participation in community methods.

Radio was a different story. Although a large portion of the course offerings used individual methods, they instructed a very small percentage of radio’s participants. A majority of the radio course offerings used group methods to instruct nine of ten radio participants. This fact should alert educators to revamp their thinking about radio. For continuing education instruction, radio is not a tool to reach the isolated individual, but is a potent means to reach specialized audiences organized into groups.

Although usually considered the media for individual consumption, newspapers, magazines and direct mail were used in some group-structured efforts.

Individual viewing at home can be as effective as group viewing when it involves highly motivated people who have paid a fee for a course offering concerning their own professional improvement. No significant difference in learning achievement was noted between individual and group viewing methods. These findings by Grant and Merrill breathe new life and hope into the possibilities of using television in reaching the highly motivated professional in his home.

Graded tests appear to challenge the participant involved in individual methods. It acts as a strong motivation for viewing or reading and aids as a guide for the individual in determining his progress. Although frowned upon for most adult education endeavors, tests may perform a valid aid for learning via the mass media.
When it is desired to use group methods for a course offering, it is easier to do this through existing groups or organizations, if these exist, rather than to set up a new group structure. Groups are difficult to form and to maintain. Their formation places an unusually heavy financial burden on the endeavor. Experience indicates that nonprofessional participants will not support the full expense of group organization for viewing or listening. When local groups have a strongly felt need for a nationally or regionally produced program, they will participate with a minimum of "dropouts."

Adequate lead time must be provided before presenting the course offering in order to allow local groups to incorporate the course offering into their planning. This requires from six to 12 months. Local groups resist a crash program which disrupts their existing plans. The implication for future endeavors is to establish liaison with the groups well in advance of releasing the course offering. It is essential to offer training sessions for group leaders or discussants. If the group is to participate in a feedback system, this must be explained adequately and the group leader prepared through training sessions.

Normally, conventional training methods in continuing education transfer the content from the subject matter specialists through a local leader to the participant. In contrast, the mass media make it possible for the subject matter specialist to deliver the content unadulterated to the learner. The volunteer leader then acts as a discussion organizer to help the participants adapt the relevant content to their problems. Mass media prevent the local leader from being the gate-keeper of information and allow him to perform his function as a group leader in the pre- and postdiscussion periods.

Group methods were used for 43 of the 92 course offerings via radio to 94.7 per cent of the participants. This implies that group methods are the most successful methods for radio at the present time. Normally thought of as a medium for reaching the isolated individual, radio is now employed to reach specialized groups.

A study of the group methods via radio indicated that the active interaction of the participant with the instructor was a key ingredient which could be found in the properly conducted two-way radio conference. This group method preserves the instructor-student relationship since an interchange of questions, answers and discussion takes place almost as easily as it does in a face-to-face situation.
The hope of early innovators for the community method via television seems not to have withstood the ravages of time. Communities can sustain organized educational efforts using community method via television only when consistent and extensive resources are allocated to the effort as demonstrated by the St. Louis Metroplex Assembly and the New York Regional Plan Association. When these resources were depleted, the project failed to gain support in the community and usually folded.

**Purposes**

The relationship of the learner to the knowledge he is to acquire as expressed in the three learning activities of acquiring information, acquiring skills, or applying knowledge constitutes purpose.

The acquisition of information was the most dominant purpose for continuing education via the mass media as revealed by the study. This may stem from the fact that the mass media are excellent disseminators of information, but are not capable as devices to aid in the acquisition of skills or the application of knowledge. This is confirmed to a large degree by the number of participants. However, the sizeable increase in the number of participants trying to acquire skills over the comparable number of available course offerings for this learning activity may indicate a preference which institutions should note for future development of course offerings. The difference in the relationship of participant to the knowledge he was to acquire varied greatly among the main institutional categories. Higher education had a definite bias toward the production of course offerings for acquiring information. Professional health science is deeply engrossed in skill-orientated course offerings. This fact is also true for elementary and secondary education and governmental agencies. Volunteer groups have the highest per cent of interest in the application of knowledge.

The obvious misuse of mass media as devices for continuing education instruction will not be altered materially until the instruction processes most appropriate for various learning activities (information, skills, and knowledge) via the media can be identified more clearly. Until there is more specific information than is now available, the use of the mass media will depend on the innate judgment of the user.

There are no permanently right answers on how to conduct continuing education instruction via the mass media. Much that is known is conditioned by the rapid change in technology and the needs of the participants.

Society has provided limited resources for continuing education instruction via the mass media during the period covered by this study.
The current trend indicates that funds will be allocated for future efforts if these efforts contribute to progress and the general welfare.

Evidence indicates many institutions have successfully innovated to overcome or minimize the limitations of the mass media and are now conducting vigorous efforts. Although there may not be a deluge of continuing education instruction via the mass media in the immediate future, successful efforts as verified by this study indicate it is practical. Any institution seeking to fulfill its mission in continuing education will need to consider the mass media to determine if one or more of the media are adaptable to their educational objectives for life-long learning.

Synthesis

Continuing education instruction via the mass media does not exist in separate parts, but rather as a whole. Briefly, this discussion attempts to so relate methods, purposes and devices that there evolves a whole made possible by the classification scheme used in the survey. Table 1 portrays the relationship of methods, purposes and devices as measured by course offerings. In a real sense, this depicts the allocation of valuable educational resources made by institutions in the form of course offerings to the various combinations of devices, methods and purposes. Table 2 indicates the measurement by participants.

It is possible to glean a descriptive profile of the whole by taking the top-ranked category and inserting it into a descriptive phrase. Thus, if course offerings were used as the basis of this description, the following would be appropriate: Higher education institutions (67.6 per cent) were providing course offerings of general education (67.3 per cent) between January, 1962, and July, 1967, in 44 states via television (88.7 per cent) employing individual methods (70.2 per cent) for the purpose of acquiring information (67.5 per cent).

If the number of participants were the unit of measure, the description would be: Higher education institutions (48.7 per cent) were reaching an increasing number of participants with inservice professional education (36.7 per cent) between January, 1962, and July, 1967, in 44 states via television (64.5 per cent) employing individual methods (66.3 per cent) for the purpose of acquiring information (58.3 per cent).

The above descriptions depict the dominant role of higher education institutions in continuing education instruction via the mass media. They report the availability of general education as measured by the number of course offerings and the apparent utilitarian objectives of the participants as indicated by the number of participants in the inservice professional education. Efforts were available in nearly every state. As a device, mass media were normally used to reach the isolated individual who was trying to acquire information.
TABLE 1
CONTINUING EDUCATION INSTRUCTION AS CLASSIFIED BY METHOD, PURPOSE AND DEVICE
FROM JANUARY, 1962, TO JULY, 1967, ACCORDING TO THE NUMBER OF COURSE OFFERINGS*a

<table>
<thead>
<tr>
<th>Method</th>
<th>Individual</th>
<th>Individual-group</th>
<th>Group</th>
<th>Community</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Information</td>
<td>Skills</td>
<td>Knowledge</td>
<td>Information</td>
<td>Skills</td>
</tr>
<tr>
<td>Television</td>
<td>580</td>
<td>178</td>
<td>54</td>
<td>88</td>
<td>65</td>
</tr>
<tr>
<td>Radio</td>
<td>37</td>
<td>14.2</td>
<td>4.4</td>
<td>7.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Newspapers</td>
<td>1</td>
<td>.2</td>
<td>.3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Magazines</td>
<td>2</td>
<td>.4</td>
<td></td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>Direct Mail</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>109</td>
<td>.7</td>
</tr>
<tr>
<td>Total</td>
<td>626</td>
<td>184</td>
<td>63</td>
<td>109</td>
<td>70</td>
</tr>
</tbody>
</table>

*aPer cent is based on the total of 1,244 course offerings.
TABLE 2

CONTINUING EDUCATION INSTRUCTION AS CLASSIFIED BY METHOD, PURPOSE AND DEVICE FROM JANUARY, 1962, TO JULY, 1967, ACCORDING TO THE NUMBER OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Method</th>
<th>Individual</th>
<th>Individual-group</th>
<th>Group</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Information</td>
<td>Skills</td>
<td>Knowledge</td>
<td>Information</td>
</tr>
<tr>
<td>Television</td>
<td>N</td>
<td>593,044</td>
<td>119,893</td>
<td>11,856</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>35.1</td>
<td>7.1</td>
<td>.7</td>
</tr>
<tr>
<td>Radio</td>
<td>N</td>
<td>4,470</td>
<td>12,000</td>
<td>430</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>N</td>
<td>500</td>
<td></td>
<td>.7</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines</td>
<td>N</td>
<td>34,872</td>
<td>332,137</td>
<td></td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2.1</td>
<td>19.7</td>
<td></td>
</tr>
<tr>
<td>Direct mail</td>
<td>N</td>
<td>1,187</td>
<td>19,221</td>
<td>1,186</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>.1</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>N</td>
<td>633,854</td>
<td>452,030</td>
<td>31,077</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>37.6</td>
<td>26.8</td>
<td>1.8</td>
</tr>
</tbody>
</table>

*Per cent is based on the total of 1,685,058 participants.*