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Transformation of Printed Course Materials into Self-Instructional Materials (SIMs): Some Basic Issues

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Abstract: Self-Instructional Materials (SIMs) are important means of imparting instruction to thousands of distance learners in India and abroad. Though almost all the open universities in India are using SIMs, very few Correspondence Course Institutes (CCIs) have opted for the same. Distance Education Council of IGNOU is providing development support to these CCIs, whilst Staff Training and Research Institute of Distance Education (STRIDE) is giving training to their faculties and course writers to transform their course material into SIM format. In this paper the authors identify some parameters and provide a checklist to suggest the way in which the course as a whole may be transformed into SIM format.

Introduction

Print based course materials are the mainstay of distance learning. The printed course materials are still the most important means of imparting instruction to thousands of learners at a distance even in the advanced countries, where Open Universities are highly developed, and multi-media have brought in revolutionary changes in educational systems (Bates, 1995). Special care, therefore, needs to be taken to ensure academic standard while preparing the course materials (Parer, 1990). The course materials should be self-instructional so that the learner may be able to learn without the support of the teacher (Rowntree, 1990)). In other words, we have to build the teacher into the course materials. The course has to be altogether self-contained (Rowntree 1990). The self-instructional materials must do most of the functions of a classroom teacher. In addition to covering the subject matter, they must provide orientation to the study, reinforcement and feedback to encourage and guide the learning process.

Self-instructional materials are generally used in Open Universities in India. IGNOU and some State Open Universities (SOUs) follow the course team approach by involving a small group of experts (internal and external) with experience of designing self-instructional materials to design and develop the material.

The Correspondence Course Institutes (CCIs) of the conventional universities in India also offer a variety of programmes through distance mode. However, the printed course materials of most of these institutions are not in SIM format. Their course materials require to be transformed and changed into SIM for effective learning to take place. The CCIs, which are about 70 in number, are at various stages as far as the quality of the materials is concerned. These institutes do not have any choice other than to transform

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their material into SIMs to survive in the quality competition among various other institutions of ODL from India and abroad.

In this paper, an attempt has been made to consider the factors of transformation, and prepare a number of checklists to facilitate the process of transformation of materials into SIM. The extent to which the existing materials might need to be changed depends on the quality of materials provided (Lockwood, 1994 and Rogers, 1987). The factors that need to be taken into account in determining both the desirability and feasibility of the possible changes to be brought in.

The Process of Transformation

Where printed materials already exist but are considered inadequate, the same may be transformed into self-instructional materials (SIMs) through the process of text transformation (Melton, 1990). This process differs from the course team process followed by many OUs into develop new materials for their programmes. It commences with the specifications of broad aims by an expert committee, undergoes refinement into detailed objectives over a period as authors/course writers move towards a consensus on the final product. The major changes in the later stages of development of materials are thus avoided. On the other hand in text transformation, major changes may have to be incorporated, if the materials are to be effective and learner-friendly.

Planning the process of transformation

The text transformation generally starts with materials that are already been available with the institution. Through a process of negotiation in the institution, if needed with the help of outside expertise, the following issues have to be determined;

- The degree of changes that are desirable
- Feasibility of transformation within a specified time scale and
- Acceptability of the changes to the commissioning institution.

Type of changes that are desirable

The changes may be grouped in two categories depending upon the extent of transformation required:

- Possibility of changing the course as a whole; and
- ii) Possible changes to be brought in the existing printed self instructional materials.

Changing the course as a whole

Changing the course as a whole is a very complex and hard task. Unless a systematic method is followed the process may go in any direction at any stage resulting in wastage of human and material resources. Keeping the complexity of the process in view, the following items have to be identified at the initial stage it self:

- Broad aims of the course
- The nature of prospective learners and their characteristics
- Learner needs and requirements
- Achievement of the learners in terms of learners objectives from the course
- Effectiveness of the course in helping learners to achieve their objectives.

A sample checklist to help identify the ways in which the course as a whole might be transformed is presented in the following table:

Table 1: Parameters to facilitate the Transformation of Instructional Materials

SI.	Parameters	Sample check points
1.	Broad aims of the course	 Identify the educational aims of the course and how they have to be met Identify specific learners achievements after completion of course and the role of transformed course materials in achieving the same
2.	Objectives	Are clearly stated, related to the aims of the course Are precise and specific Are attainable, measurable and appropriate
3.	Characteristics of the learners	 In service-part time or full time First time entrants Requirements for providing continuous, flexible and personalised student support service Response to course and specified form of counseling/ teaching from learners
4.	Teaching/Learning strategies	 Content at an appropriate level of the learners Identification of media use Involvement of learners in developing appropriate activities Forms of feedback and support needed to learners
5.	Content	 Facilitate the acquisition or development of stated objectives Relevant to the learners social, cultural, economic and political environment Provide a balance between knowledge, attitude, skills and practical application Provide a dialogue with the student
6.	Unit Structure/ Organization of content	 Properly divided into sections and sub-sections Follows a logical sequence of ideas from simple to complex Is integrated to reinforce concepts Encourages the learners to think on their own
7.	Exercises	 Identify the domain to evaluate knowledge, skills and /or practical application Test the stated objectives Contain the relevant concepts, knowledge and skills
8.	Assignments	Questions and instructions are clear Cover the entire lesson / unit Give clear instructions on submission dates etc. Provide timely feedback
9.	Summaries	Are effective in putting ideas together

The parameters and attributes given in the above table provide broad guidelines for the way in which the course as a whole might be transformed. During the process of transformation, many more points and issues may emerge, which have to be taken note of and due and timely attention has to be paid, so that the final product will be of expected quality.

Changes in the existing Printed Self-Instructional Materials

When an institution thinks that the whole course need not be transformed, and only partial transformation is needed, the following issues may be kept in mind. The adequacy and effectiveness of the course concerned to serve the intended purpose may be improved and enhanced in some cases by a process of thorough editing of the materials. Such changes can be minor, moderate or major that appear desirable from an educational point of view and changes that can actually be made in practice.

Minor Changes: Minor changes include textual duplication, reduction in the number of examples and relocation of some materials improvement in the presentation and readability of the materials etc. The impact of such changes on learning are minimal. The approach is suitable for existing materials which are already well structured and well presented from the learner point of view.

Examples of such minor changes are: that an institution has borrowed the material from other institution for use and wants to incorporate minor changes in the form of adding local examples and relating them to the local needs.

Moderate Changes: The changes are related to inclusion of a variety of learning aids to facilitate learning in addition to editing and improving presentation. Such changes are intended to add more content to the text; writing clear introductions and summaries that improve the learning aspects; and to give a perspective, and activate and involve learners more in the process of learning. This approach would be appropriate, if the existing materials are already presented in a fairly logical and well organised manner.

Major Change: Major changes involve a complete restructuring of the original course materials. For example, if the original material is presented in a textbook form, one might consider re-organising the content in a more logical form, incorporate other teaching aids, and make it self-instructional.

Revision and Updating of Print Materials

The distance education course materials should have a fixed life span. At the end of that period programmes have to undergo the process of revision. The revision of the course materials may be undertaken under the following circumstances:

 Content of the course becomes out dated by new developments or inventions in the relevant fields; Quantum of course maintenance activities become too large.

The following indicators may be taken into consideration for effecting the revision of the course materials:

- Watchful eye on further developments in the field concerned,
- Track of the new techniques/designs for preparation of quality text,
- Identification and correcting the errors possibly found in the printed text materials,
- · Change of a word or phrase or a mark of punctuation here and there,
- Occasional reprinting of a short section or two, if the errors are too many to list down,
- Dated and coded list of errata.
- The degree of the success of a course,
- The period of the operation of the course, and
- The life expectancy of the course.

Quality Assurance

Any type of transformation should be viewed as a creative, and not a mechanical exercise. As mentioned earlier, the extent one plans for this complex process determines the result and quality of the materials. While considering any of the three forms of transformation (re-structuring the basic content of materials or minor additions for improvement, and major changes) it is desirable to develop procedures acceptable to all those involved in the transformation of materials. Without proper quality checks, the transformed materials may not serve the purpose. This has to be emphasised at the very beginning of the activity at the institutional level through brain storming sessions, group meetings and informal discussions. In this process, whatever resistance that may be there in the minds of a few can be overcome, and the rest of the process can be smooth.

Distance Education Council (DEC) and Staff Training and Research Institute of Distance Education (STRIDE) vis-à-vis Transformation of Course Materials

The Distance Education Council, entrusted with the responsibility to promote, coordinate and maintain standards in distance education system, has taken a number of steps to encourage the process of transformation of course materials by correspondence course institutes, by providing development support to the following 30 Correspondence Course Institutes (CCIs) during 1999-2000 to transform their materials into SIMs and also to conduct staff development activities and use of technology in delivery of programmes.

- 1. Madurai Kamraj University, Madurai, Tamil Nadu
- 2. University of Madras, Chennai, Tamil Nadu
- Andhra University, Visakhapatnam, Andhra Pradesh

- 4. University of Delhi, Delhi
- Punjabi University, Patiala, Punjab
- Kakatiya University, Warangal, Andhra Pradesh
- Pondicherry University, Pondicherry,
- 8. Patna Uiversity, Patna, Bihar
- 9. Panjab University, Chandigarh, Punjab,
- Vidyasagar University Midnapore, West Bengal
- 11. University of Jammu, Jammu and Kashmir
- 12. SNDT Women's University, Mumbai, Maharashtra
- 13. Burdwan University, Burdwan, West Bengal
- 14. Tilk Maharashtra University, Pune, Maharashtra
- 15. M.G. University, Kottayam, Kerala
- 16. CIEFL, Hyderabad, Andhra Pradesh
- 17. University of Hyderabad, Hyderabad, Andhra Pradesh
- 18. M.G.C.G. Chitrakoot, Satna, Madhya Pradesh
- 19. M.D. University, Rohtak, Haryana
- 20. NEHU, Shillong, Assam
- 21. University of Kashmir, Srinagar, Jammu and Kashmir
- 22. Alagappa University, Karaikudi, Tamil Nadu
- 23. Sri Krishnadevaraya University, Anantapur, Andhra Pradesh
- 24. M.S. University, Thirunelveli, Tamil Nadu
- 25. University of Mumbai, Bombay, Maharashtra
- 26. BITS, Pilani, Rajasthan
- 27. G.J. University, Hissar, Haryana
- 28. Tripura University, Agartala, Tripura
- 29. Maulana Azad National Urdu Open Unniversity Hyderabad, Andhra Pradesh
- 30. S.V. University, Tirupati, Andhra Pradesh

STRIDE has been entrusted with the responsibility of organizing activities related to staff training and development and has conducted a number of workshops at many institutions mentioned above who have come forward to train the staff and course writers of SOUs and CCIs to transform their course materials into SIMs. The response and the results have

been very encouraging from all the SOUs and 7-8 CCIs that have undertaken the task of transformation of their course materials into SIMs. The response to the workshops conducted by STRIDE from the above mentioned institutions is overwhelming, and the faculty of the SOUs and CCIs have already transformed bulk of their materials, and the remaining materials are being transformed.

Need for Sharing of Resources

The transformation and development of course materials is a time consuming and costly process. Further, a wide variety of programmes are on offer by the SOUs and CCIs. To ensure certain minimum standards and quality of the print materials, sharing of materials (adoption/adaptation/translation) among institutions may play an important role. The sharing provide — (a) wider choice of courses, programmes to learners (b) facilitate the optimal utilization of materials among the institutions. The concept of sharing, if followed by many institutions, the programmes will also be cost-effective.

Initially there may be resistance /suspicion among the institutions to accept sharing the knowledge/resources. But with proper negotiations and understanding among the institutions, the concept of "pooling and sharing resources (both human and material)" can take the institutions a step ahead in the quality aspect. DEC and STRIDE play a crucial role in promoting this concept further, which has already caught the attention of many institutions in India.

Summary and Conclusion

In this paper we have discussed some key issues pertaining to SIMs and have identified parameters. The parameters (and the checklist) may be helpful to Correspondence Course Institutes or any other institutions which want to use self-institutional material by transformation of the course materials into self-instructional materials.

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