TOPIC 7

Interaction and Learner Support Systems

Overview

    Source materials for this topic

Providing learner support in open and distance learning

    Issues

    Problems distance learners face

    Special needs of distance learners

    Key times in the learning cycle

Instructional support

    Role of instructional support

    Academic advice

Non-instructional support

    Admissions and registration

    Counselling

    Administrative support

    Finance

Checklist for successful delivery and support

Guidelines for producing interactive learning materials

    Audio cassettes

    Teletutorials or audio conferences

    Audiographics

    Video cassettes

    Video conferencing

    Computer conferencing

Practice exercise

    Arguing for increased learner support

1. Overview

These materials support a discussion on the topic of the issues that confront open and distance learning programmes in providing and managing support to learners. The emphasis in these materials is on those features of providing learner support using the various communications technologies that are available for this purpose. Specific issues such as effective tutoring skills and selection of appropriate tutors and counsellors are covered in greater detail in Trainer's Toolkit COL 006 on Learner Support in Open and Distance Learning.

1.1 Source materials for this topic

Brindley, J., J. Roberts, and B. Spronk. *Learner's guide to the information highway.* Ottawa: Office of Learning Technologies, Government of Canada, 1997.

Burge, E., and J. Roberts. *Classrooms with a difference: a practical guide to the use of conferencing technologies.* Toronto: Ontario Institute for Studies in Education,1993.

Commonwealth of Learning. *Perspectives on distance education: student support services.* Vancouver: COL, 1992.

Evans, T. *Understanding learners in open and distance education.* London: Kogan Page, 1994.

International Extension College. *Electronic media in distance education.* M.A. in Distance Education, Course 6. Cambridge: IEC, 1995.

Lewis, R. *Tutoring in open learning*. Lancaster: Framework Press, 1995.

Mills, R., and A. Tait. *Supporting the learner in open and distance learning.* London: Pitman, 1996.

2. Providing learner support in open and distance learning

2.1 Issues

The issues involved in providing support to distance learners emerge in answering questions like the following:

- What are the characteristics of open and distance learning that determine the support needs of distance learners?

- What are the main roles of learner support in the light of these needs?

- What are the different stages in the learning process at which learners require support?

- What are the essential characteristics of a successful support system?

2.2 Problems distance learners face

Open and distance learners face problems that include:

- isolation in that distance learning participants may have little or no opportunity for face-to-face contact with the institution, their tutor, or fellow learners;

- difficulty organising studies and finding sufficient time to study;

- difficulty balancing work, study, and family commitments;

- lack of motivation;

- lack of resources and equipment – in that learners may not have access to specialist libraries or practical equipment needed for studies; and

- difficulties in developing appropriate study techniques such as note taking and essay writing.

> *Discussion:* What problems have distance learners faced in your own and your participants' experience? The case studies that are included in this kit also provide examples of learner support needs and methods.

2.3 Special needs of distance learners

Distance learners have special needs, which include:

- information to help learners relate to the institution and understand its system;

- contact with tutors to help maintain motivation and overcome learning problems;

- institutional identity, which is some means of helping learners identify with a remote institution and to feel that they are part of a body of learners rather than studying in isolation; and

- advice on how to study; as well as that provided within the course itself, learners often need additional support to develop good study techniques.

2.4 Key times in the learning cycle

Some of these support service needs of distance learners are indicated in the following table.

Stages in the Learning Cycle

Stage in learning cycle	Learner needs
Pre-enrolment	information about the institution and its courses advice on which courses to choose advice on how to finance studies
Enrolment and starting study	more detailed information about the institution and study procedures advice on studying at a distance advice on planning studies
Completion and graduation	notification of exam results

	career advice
	advice on further studies

> *Discussion:* Provide an example of a working support system with which you and your participants are familiar. A variety of examples of learner support systems are also contained in the case studies that accompany this kit.

3. Instructional support

3.1 Role of instructional support

Usually the key support function in open and distance learning is that of providing tuition and academic advice. The cost of providing tutorial support often represents a substantial proportion of the unit's overall budget. Careful organisation in this area is therefore important for the efficient running of the unit as a whole.

3.2 Academic advice

All tutorial methods allow learners and tutors to interact, so learners can benefit from the advice of tutors and get the most from their materials.

At a minimum, in all learning systems ways have to be found

- to inform learners of who is their tutor;
- to inform tutors of who their learners are; and
- to enable learners and tutors to communicate.

Because of the differences in the media used for communication, tutorial models have different characteristics, as summarised in these questions:

- Does the tutor–learner dialogue take place synchronously or asynchronously? That is, do the tutor and learner need to interact in real time or can a response be delayed?
- Do learners interact solely with a tutor or do they also interact among themselves?
- Can learners access the tutorial service from home or do they need to travel to an access centre?

See the case studies for the University of Nairobi Distance Education Teachers Programme and the Open Learning Institute, Charles Sturt University, for examples of institutions that are struggling with decisions about provision of face-to-face residential schools and tutorial sessions.

The following table identifies the management requirements for support systems with these characteristics.

Dimensions of Tutorial Models

Characteristic	Requirements of system
Synchrony *Examples: learners attend scheduled face-to-face or audio conferenced or video conferenced tutorial sessions*	High requirement for detailed scheduling High need to monitor technical performance of delivery medium as breakdown is a critical problem High need for on-hand technical support High training requirement so learners will master medium
Asynchrony *Examples: learners can telephone or e-mail their tutors individually, or communicate with tutors and other learners via computer conferencing*	Highly desirable to provide flexible temporal access to system Lower need for monitoring technical performance than for synchronous systems, as downtime can be overcome later and learner can re-enter the system Technical skill or operation of system by learners can be gained over a longer period, because mistakes are not as critical as in synchronous systems
Tutor–learner interaction only	Higher need to guarantee learner access to some minimum guaranteed amount of time High need to ensure tutor availability at regular times Lower need to schedule interaction in a precise manner
Tutor–learner and learner–learner interaction	Requirement to provide inter-group access High need to schedule group interaction if interaction is also synchronous High need to ensure consistent technical performance of technology being used as downtime will affect multiple users Learner needs to be informed of how and when to access system
Access from home	Scheduling is critical if synchronous group interaction is to occur Learner needs to be trained at a distance to use the system

Access through study centre	High need to organise a facility at which learners meet
	High need to schedule group meetings and inform learners
	High need to ensure performance of technology used

4. Non-instructional support

Though less visible than instructional support and less central to the actual process of learning, non-instructional support is vital to the smooth operation of distance learning and must be integrated with instructional support.

Generally speaking, the following types of learner support are available.

4.1 Admissions and registration

The admissions and registration support subsystem includes the following functions:

- marketing;
- facilitating applications;
- making offers;
- registering learners; and
- matching learners appropriately with courses by level, subject, and so on.

4.2 Counselling

Learner problems that require referral to counsellors include:

- financial difficulties;
- family problems;
- difficulty in maintaining motivation;
- problems in finding sufficient time to study;
- balancing conflicting commitments; and
- physical difficulties or barriers, including limited mobility, hearing, or sight impairment.

4.3 Administrative support

A teaching unit or institution needs to inform learners of the following kinds of information:

- the office hours;
- the best times to call for advice;
- any days when the office is closed;
- the name of the learner's tutor;
- how to contact the tutor;

- who to write to or telephone about different matters;

- deadlines for sending in tutor-marked assignments; and

- dates of examinations.

Depending on the tutorial system that is in place, other required information may include:

- location and hours of nearest learning centre;

- facilities available at learning centre;

- names and addresses of other learners (with their permission); and

- updates on curriculum changes, procedures, and so on.

4.4 Finance

Part-time learners are typically disadvantaged in awards schemes. Distance learning programmes therefore typically seek scholarship and bursary funds, which entails fund raising as a function.

> *Discussion*: Provide an example of a working support system, preferably one that is familiar to your participants or at least relevant to their situation. The case studies that accompany this training kit also contain brief descriptio ns of a variety of learner support systems.

5. Checklist for successful delivery and support

If your support system is successful, you should be able to answer 'Yes' to the questions in the following checklist.

Checklist for Successful Delivery and Learner Support

- ❑ Do you know your learners' geographical location, age range, access to facilities, academic ability, gender, and so on?

- ❑ Are staff sensitive to gender, societal, and cultural differences?

- ❑ Are staff sensitive to the frustrations and time constraints adult learners often face?

- ❑ Do staff have up-to-date knowledge about the institution and its courses?

- ❑ Are your support systems flexible and learner-oriented, available to learners when and where they need them?

- ❑ Are the resources allocated to learner support adequate?

- ❑ Is there an appropriate balance of resources allocated to the development of materials and subsequent support of learning from those materials?

□ Does your support function provide support to the internal functions of the learning unit as well as to learners?

□ Is your decision to keep support services centralised, or to manage them on a regional or decentralised basis, appropriate to meeting the needs of your learner population?

□ Does your learner record system contain the following information:

- personal details, including name, address, age, family circumstances, and employment?

- academic and professional qualifications?

- special requirements such as specially adapted materials for disabled learners?

- tutorial record, including dates when assignments were received, grades, and copies of tutor comments?

- list of materials sent, including date of dispatch?

- record of attendance at face-to-face sessions?

- fees paid?

□ Are your records detailed, accurate, and up-to-date? Do you ensure that:

- records systems are regularly monitored to ensure they are functioning efficiently?

- information is disseminated to the right people at the right time?

- records are kept in a secure fashion so that only authorised personnel have access to them?

- legal requirements governing the handling and storage of information are met?

6. Guidelines for producing interactive learning materials

Learning materials themselves are an important aspect of providing support to open and distance learners and of promoting their effective interaction with those materials and, where possible, with their tutor or instructor and with other learners. The characteristics of the media available for open and distance learning are described elsewhere in this kit, in Topic 4 (Media Characteristics). The following guidelines focus on how to exploit these characteristics effectively to promote interactivity and foster learning when designing materials and learning activities using the following media.

6.1 Audio cassettes

The hints that follow apply mostly to the production of audio cassettes, but many of them apply equally well to scripting radio broadcasts.

Writing the script

● Write the script for the ear, not the eye: write for the words to be spoken, avoiding wording that might cause the narrator to falter.

- Listeners find it easier to understand short sentences: convert any long sentences into two or more short ones.

- Avoid using words that are difficult to hear or to distinguish from other words because they sound the same (homophones like 'see', 'sea', and 'c'); if you can't avoid them, make sure their meaning is clear from the context.

- Be informal, addressing the listener as 'you'.

Including visuals and audiovision

- Make sure the audio programme matches your visuals; for example, the audio should say, 'while listening to this cassette/programme, you should have in front of you...' and the print material should say which cassette to play or which programme on the schedule the print material applies to.

- If using audiovision, stay close to the words in the frames, but do not duplicate them exactly, otherwise learners may think they could have done better with everything in print.

- From the learners' point of view, make the visuals and the commentary reinforce each other as much as possible: for example, make the teaching points about a visual when learners are looking at it, not in a wordy introduction while they are looking at the previous visual.

- Give the learners enough time to take in and digest the visuals.

- Make sure your guidance to the listeners about where to look is completely clear.

Stopping the tape

- If you want learners to write some notes on a diagram or pick up an object and examine it, it may be enough to insert a two- or three-second silence, but if the activity will take longer, tell them to stop the tape.

- You can use a music jingle as a signal to stop the tape, so that you do not have to sound authoritarian by frequently ordering them to 'stop the tape'.

- If the activity needs a lot of prior explanation on the tape, be careful to use wording that will not prompt listeners to stop the tape prematurely: for example, 'I want you to try the question in section 8. But I need to explain something first...' might lead them to stop prematurely before you have started to explain. Rather, begin with a postponing phrase, 'In a moment, I'm going to ask you to try the question in section 8, but I need to explain something first'.

- When you include more than one activity in a 'tape stop', help learners' memories by indicating in print when to restart the tape.

- It is worthwhile mentioning comments about or answers to the activities on tape, after the tape stop, even if they are in print, reminding learners of what they have just done. For example, 'I hope you found exercise 8 revealing. You should now be able to...'

- Or you could go through the answers, talking about them.

- As a general rule, have at least three sentences between tape stops.

Technical points

- Comments about, or even answers to, the activities can be added in print or on the tape, depending on which seems best. Do the learners need a printed version?

- Often you need to communicate what you have assumed about the learners' previous knowledge and, possibly, where further details on the same topic can be found.

- Long lists of verbal instructions on the tape will overload learners' memories. Where there is a list in the visuals, number the items so that you can refer to them clearly.

6.2 Teletutorials or audio conferences

Teletutorials are most likely to succeed when the following conditions are present.

Course and programme design

- Teletutorials are planned as part of the entire course design and are not a last-minute 'add-on'.

- They are held regularly, at least monthly.

- The same group is retained throughout the series of teletutorials.

Pre-planning

- Prior face-to-face contact or personal communication has been made.

- The tutor has background knowledge of participants, including their teleconferencing experience, and uses that knowledge.

- Learners are made aware of the intended structure of the tutorial.

- Instructions and agendas are clear and comprehensive.

- Learners have prepared for the session by completing assigned readings and other tasks.

- Supportive material like tables and diagrams are sent ahead and clearly annotated.

- The tutor is conversant with the equipment and aware of its capabilities.

Making arrangements

- The tutor and learners are in an environment they find conducive to learning.

- All references are readily available.

- At remote sites, one person serves as local animateur and spokesperson for the group.

- There is backup in case the tutor is unavailable because of illness.

- Adequate advice is given to responsible parties to ensure an accurate call list.

- Learners are given an explanation if the call does not eventuate.

Technical considerations

- All participants are promptly connected.

- They remain connected throughout the tutorial.

- Audio quality is clear and sustained.

- Any problems with equipment or line quality are reported to the telecommunications co-ordinator.

Conducting the tutorial

- The tutor uses connection time to establish introductions and set up a more personal approach.

- The tutor is relaxed.

- The tutor ensures there is variety in task and tone.

- Time is managed to allow for all the planned goals to be achieved.

- An appropriate balance is achieved between conceptual and management issues.

- The tutor manipulates the discussion with tact and sensitivity.

- Silences are allowed for and not seen as threatening.

Involving learners

- Learner participation is monitored and an attempt is made to ensure some parity over several tele tutorials.

- In early sessions, learners identify themselves as they make comments.

- Direct exchanges between learners are encouraged.

- Learners contribute readily but not simultaneously.

- Constant attention is given to turn-taking, and maintenance of a courteous and polite atmosphere in which no one is left out or allowed to monopolise the discussion.

- Teachers use frequent questioning, to ensure that each participant is following the session and remaining involved, with use of discussion rather than lectures.

- Any presentations are kept to a maximum of seven minutes.

Follow-up:

- There is willingness to follow up with written material (bibliographies, etc.) where appropriate.

- Tutors are willing to answer individual or complex queries by later call or letter.

- Tutors and learners evaluate their performances and build on this for later teletutorials.

6.3 Audiographics

Here are some conditions for effective use of audiographics in teletutorials.

Class planning and management

- Each session must be carefully planned to ensure all participants are present at the start and the session should include a variety of teaching styles and activities.

- Using a drawing game such as Pictionary® for practice sessions with the technology will generate a few laughs and prompt learners to relax with tools which at first can look quite intimidating.

- The teacher needs excellent class management skills to be able to manage two or more distance classes simultaneously as well as control the equipment.

- Each class needs an animateur who will shoulder organisational, technical and social responsibilities connected with running the class with audiographics and be a spokesperson for the class.

Technical points

- The quality of the sound must be high to enable the teacher to pick up cues from the classes and for learners to be able to concentrate and participate.

- Visuals must be clear, and good pointing or annotation tools must be available, such as underlining, selecting and highlighting, for use by teacher and learners.

- There must be good facilities for spontaneous graphics during the session, in addition to prepared graphics delivered before the session starts, such as through graphics tablets, preferably with different coloured pens for each site.

- Graphics need to be legible and simple as opposed to complex, with a larger print size and drawings and text which complement and supplement what people are talking about rather than conflict with it.

6.4 Video cassettes

A number of kinds of interaction between learners and video are possible, a fact that designers of video cassettes might usefully keep in mind. Some of these depend on whether learners:

- preview the video;

- follow guidance on how to use the video;

- view the video only when instructed to do so, or choose to view the video several times for their own study purposes;

- study the video on its own, or integrate their study of it with their study of the rest of the course;

- use the video search facilities to look systematically for items;

- use questions (in print) to focus on parts of the video;

- stop the video to answer questions asked on it (in print), or watch fairly continuously, trying to remember what the answers are;

- follow instructions on when to stop/start the video, or simply play it right through;

- review segments of the video only for the purpose of answering questions, or rather for general interest and clarification; and

- take notes indexed to the video content.

6.5 Video conferencing

Video conference technology offers the advantage of the visual presence of others who are geographically distant, thereby creating a strong sense of social presence and the possibility of a warm and supportive environment for learning. Here are some hints for how to realise the full potential of this technology.

Planning

- Plan to have a technical facilitator at each site to operate the control pad and, if possible, train these facilitators before the class starts.

- Think about how the different visual resources will be integrated: the learners, videocassette clips, graphs, diagrams, photographs, and slides.

- In designing graphics, use pastel coloured paper, keep messages simple, and use large-sized fonts.

Technical points

- Give some attention to camera use. Experiment with camera angles, shots, and visual inserts so that on-screen images are steady, in focus, well-composed, and interesting. Remember that learners are accustomed to high quality camera work on commercial television.

- If you plan to use graphics, establish two automatic pre-set camera positions, one for the graphics and one for the people.

- Display text material long enough for a slow reader to process, and display non-text material (for example, a cartoon or photograph) for only three or four seconds.

- Vary camera shots judiciously. Some camera shots that work particularly well are mid close-up (begin at waist level), full figure shot (entire body), and wide angle (for a group shot).

- Close-ups do not work well. Although the person may not seem to move much, there is still a lot of motion from the camera's perspective — eyes blinking, hands moving, note taking, shifting in chair, and so on.

- Pay attention to lighting. Fluorescent lighting is usually adequate for educational use. Additional soft lighting which highlights faces and breaks up shadows will improve the image.

- Avoid backgrounds that are too cluttered or have too much white. Also, avoid clothing with stripes or 'busy' patterns, as they will cause the camera's focus to oscillate and the picture will not be clear.

Conducting the video conference

- Behave as naturally as you can. Sit directly in front of the camera and look at it while you are talking.

- Do not move too much or too quickly.

- Review the audio conference guidelines on interpersonal interactions (see previous pages) as they are also fundamental to fostering interaction in videoconferencing.

- Expect to participate in two or three sessions before you feel comfortable.

- Facilitate the technical process by commenting on issues that need to be resolved.

6.6 Computer conferencing

There are a number of specific learning activities for which computer conferencing works very well, if appropriately designed and integrated with other resource materials. These include:

- seminars;

- small group activities;

- role plays;

- debates;

- assignments;

- simulations;

- guest expert visits;

- whole class discussions; and

- problem solving.

Here are some guidelines for preparing and facilitating sessions that will work in these contexts:

Technical points and training

- Ensure that learners have easy and regular access to a computer and modem, as well as to the most cost effective long distance services.

- Train learners to use the software before they deal with the content of the course.

- Ensure that a technician is available for support immediately before, during and after your initial series of conferences.

Facilitating the conference

- Have clear objectives for the interactions. People must feel that their on-line time is well spent.

- Plan a structure of subconferences that focus on specific topics. Organisation helps to keep messages linked.

- Keep your messages concise, on-topic, and preferably no longer than one screen, or 10 lines. One idea per paragraph is the maximum.

Fostering participation

- Introduce yourself and the conference rationale.

- Have learners introduce themselves to each other

- Use informal and courteous responses, directions and questions. They read better than a staccato, formal style.

- Encourage people to keep up with the messages. Information overload can be daunting.

- Use learners' responses constructively. Learners will feel respected and included.

- Use humour only when you know the group very well.

7. Practice exercise

7.1 Arguing for increased learner support

Instructions: Divide the participants into two groups. Describe the following scenario and situation to both groups.

Scenario: An open and distance learning unit has been in operation for eighteen months now at Prestige University. For the past six months there have been three courses actually being delivered by distance means by this unit, using a basic correspondence model. Learners can telephone the unit if they have problems, but no continuous assessment is provided and learner performance is assessed only by the final examination, which learners must sit at the same time – indeed in the same examination hall – as the on-campus learners in the course.

Situation: The director of the open and distance learning unit is meeting with the Pro-Vice Chancellor, Learner Services, to whom she reports, to argue for more funding so that tutors can be paid to support learners during the course using a variety of already available media and facilities (for example, the telephone, and the regional offices) and not just to mark the final examinations.

Task: Group One is the Pro-Vice Chancellor group. Their task is to come up with arguments, from a strictly conventional, campus-based point of view, as to why learners ought not to need this 'special' service. Group Two is the Distance Education Director group. Their task is to come up with arguments from the point of view of the Distance Education unit as to why learners must have the services for which the Director is asking. Ask each group to supply a 'role player' who will play out the meeting situation with his or her counterpart, and argue the case that the group has developed.

Discussion: Draw out some of the issues and problems that confront open and distance learning managers in trying to provide adequate support services to their learners.

Timeframe: Approximately one hour.

Materials: None.