Planning teaching and choosing methods

This guide focusses on the planning of instruction and the choosing of educational methods and techniques that can be used to best achieve the objectives that you set when designing a course or educational event.

Aims

This guide aims to:

- Outline some of the things your need to consider when designing instruction and choosing educational methods and techniques
- Provide an detailed listing of educational methods and techniques

Objectives

By studying this guide, you should be able to answer the following questions:

What is instruction?

What are some of the things to consider in planning instruction?

What is an educational method?

What are the factors to take into account when deciding on the educational method to use?

What are some of the educational methods that you can use?

What are some of the advantages and disadvantages of using these methods?

What is instruction?

Romiszowski (1981, p. 4) defines 'instruction' thus:

> A **goal-directed** teaching process which is more or less **pre-planned**.

In this definition it does not matter whether the goals have been determined by the educator (or educational institution or syllabus) or the learner. Similarly it does not matter whether there is one route or many routes to the goal nor who chooses the routes or methods to get there.

The following table (Romiszowski, 1981, p. 4) helps distinguish between instruction so defined and other form of educational activity:

		Specific objectives exist?	
		Yes	**No**
Pre-planned study resources exist?	**Yes**	Instruction	Visits to theatre/ museum, study tours, library, churches, etc.
	No	Projects, apprenticeships, research, etc.	Incidental learning

What is involved in planning instruction?

It is important to remember that planning instruction and choosing which educational methods to use is an aspect of the interpretation and implementation of the curriculum at the educational event level.

Curzon (2003, p. 189) argues that planning instruction requires the educator to make a number of decisions based on answers to the following questions:

> 1. What ought to be the *content* of my teaching scheme?
> 2. What ought to be the *shape* of that scheme?
> 3. What should be my precise *objectives*, the attainment of which will ensure that the syllabus, as I have chosen to interpret it, is largely covered?
> 4. What *modes of instruction* are necessitated by my choice of objectives?
> 5. What *modes of assessment* are necessitated by the type of instruction I have selected?
> 6. What *allocation of course time* is to be made for each part of the syllabus?
>
> (Curzon, 2003, p. 189)

From the list of questions by Curzon, you will note that the mode of instruction is reliant on the objectives that have been set. Given the above set of questions, what are some of the factors that need to be considered when deciding on which educational method to use to achieve the objective(s)?

Laird (1978, p. 128) notes that the decision is multi-dimensional. It involves:

- the learning objectives
- the inventory of the learners
- the norms of the organisations
- the budget.

What is an educational method?

An **educational method** is a way in which people are organised in order to conduct an **educational activity,** which will contribute towards the achievement of the objective.

The term educational or instructional **technique** is often used as a synonym for **method**. Also many educators nowadays speak, inaccurately of a method as being a **methodology** ('methodology' is the study of methods).

Methods can take various forms :

- individual methods (e.g. face-to-face tutorial)
- group methods (e.g. lectures)
- mass/community methods (e.g. using radio or TV).

It is useful to think of an educational method as a highway which leads to cities (objectives) and the training materials (visuals, readings, checklists, etc.) as the signposts along the highways. Learners may need to travel several highways in order to reach a given city. Some learners may progress slowly if they use the discussion highway, while others may learn more rapidly via a computer program. For other objectives, there may be other more appealing scenic routes to take with different signposts.

Thus the key questions facing you, the educator, must surely be: which highway do I take to reach the chosen city? How do I decide on which highway to choose?

Activity 1

Think about an educational event that you are involved in (either as a learner or as an educator). Describe how you (or the educator or trainer on the course) chose what educational methods to use?

Selecting instructional methods

Taking the following steps is one way of selecting instructional methods:

Step	Action
1	From your objectives determine whether you have to: a. communicate **information** or **knowledge** b. develop **skills** or **performance** c. change **attitudes** or **values** d. combine a., b. or c.
2	For each objective determine what **kind** or **level** of knowledge, skill or attitude must be learned.
3	Decide, having done steps 1 and 2, whether **exposition** or **discovery** methods are most suitable.
4	Consider any constraints such as: **target population** **group size** **time** **expectations and norms** **resources** etc.
5	Decide on instructional **method** and **group size.**

The following questions can help you decide on whether the method is suitable to your objective:

- What do you want to accomplish by using it?
- Is it to inform, impress, arouse, stimulate, entertain, relax or inform your learners?
- Are you planning to have the learners acquire new skills and new information, or are you exploring attitudes and feelings?

There are appropriate educational methods for each of the above areas.

According to Bloom *et al* (1956), learning can be categorised into three domains :

1. **Cognitive,** which deals with the recall or recognition of knowledge and the development of intellectual abilities and skills

2. **Affective,** which describes changes in attitude and values, and the development of appreciations and adequate adjustments

3. **Psychomotor,** which has to do with the development of manipulative skills, involving tools, machinery, procedures and techniques.

These domains are also important factors to consider when choosing the educational method to use.

You should note that most modes of instruction may be acceptable for the cognitive and affective domains, while the 'practical lesson' (e.g. demonstration, models, machines, etc.) may be more useful for the psychomotor domain.

Renner (1983, p. 11) suggests four factors to take into account when determining the educational method to use:

What can you do well?
Base your instruction on your strengths! Stick to techniques that you are comfortable with and venture into new ones with caution.

Can your students use the technique?
Do they know how to make the best use of this teaching technique? Have they ever been exposed to it? Was their previous experience a good one?

What are your learners' expectations?
Are your learners comfortable with the methods that you want to use? Do they have other ideas or expectations of the educational event and hence of the educational methods to use?

What are your physical restraints?
It is virtually impossible to use group discussions in a fixed lecture room. But it is possible to ask two people to turn around to the two behind them and to form a 'buzz group'.

The students' general ability and attitude is of importance in the selection of the education method. Some students prefer the 'permissive style' of tuition (e.g. discussions, directed private study and projects) while others tend to prefer the more directive styles (e.g. the formal lecture or lesson).

Therefore it is important to develop a profile of who your learners are and to use this as one of the factors to determine the most suitable educational methods to use.

Another factor to consider in the choice of methods is the need for lifelong learning which will and must take place out of the formal educational situation. Hence an important function of contemporary formal education should be to teach people how to learn independently in a non-formal or informal way. This makes it desirable that learner-centred educational methods that help develop or enhance the learner's ability to learn independently should be seriously considered.

The issue of group size

Practical and economic considerations about groups

1. **Educator/student ratio:** This may be fixed by tradition, by politics or by financial constraints. Sometimes an unfavourable educator/student ratio may be ameliorated by the use of other resources and structures, such as self-instruction, resource-based learning, tutors and peer teaching systems, team teaching, etc. This will release teachers from certain functions, enabling them to operate within smaller groups for at least part of the time.

2. **Available learning space:** This may be unsuitable for small group work. Usually such restrictions might be at least partly overcome by inventive planning and lobbying.

3. **Available time:** As small group learning methods are generally discovery-based, they usually require extra time. This is not always available. A mixture of group structures must take this into consideration and use small group methods where they will give the best pay-off.

Structures for large groups

Large groups may be divided into two size categories:

- Very large (mass instruction); groups of over 50 members
- Medium-large (class instruction); groups of 20 to 50 members.

The larger the group, the more difficult it is to generate effective two-way communication and the more learners need to have the skills of learning independently. However, some group structures may provide opportunities for cooperation or competition for at least part of the session's time.

Structures for medium to small groups

These groups may also be divided into:

- Medium/small (group instruction); groups of 5 to 20 members
- Very small/individual; groups of one to five members

Below about 20 members there is really no excuse for using exclusively one-way or even two-way communication patterns. Whenever feasible, one should attempt to promote interactions between the group members, so that learners learn from each other and stimulate each other to reflect and learn from their experiences.

Activity 2

Can you think of methods that can be used for groups of the following size:

- very large (mass instruction)
- medium large (class instruction)
- medium/small (group instruction)
- very small group/individual

Response to Activity 2

These are some options:

Very large (mass instruction)

One-way communication	*Two-way communication*
lecture	debate
panel	forum
symposium	panel forum
colloquy	symposium forum
demonstration	colloquy forum

Medium large (class instruction)

Similar to mass instruction

Medium/small (group instruction)

demonstration
seminar
workshop
simulation
role play
case study

Very small group or individual instruction

group discussion
buzz group
individual project
tutorial

A menu of educational methods

Here are a variety of **educational methods** that one can use:

Assignments
Brainstorming
Buzz groups
Case study
Colloquy
Computer Assisted Learning (CAL)
Debate
Demonstration
Experiential learning
Fish-bowl
Forum
Group discussion
Individualised instruction
Interview
Learning contracts
Lecture
Listening and observing
Mentoring
Panel discussion
Practicals
Project and case studies
Role play
Seminar
Simulation
Snowballing
Symposium
T groups and encounter groups
Tutorial
Visits, tours and field trips
Workshops
Etc.

These methods can be divided into two broad categories, that is, teacher centred and student centred.

It needs to be stated that one often uses a variety of methods from both categories in one educational event.

Teacher-centred educational methods

The methods used here can fall into two different approaches, namely, when teaching is **didactic** or **Socratic.** The **didactic** approach is one where the teacher uses traditional methods of providing information, eg. a lecture. The **Socratic** method is one where the teacher elicits information from students by careful questioning. Both approaches are shaped by the teacher.

The following methods will be looked at:

Demonstration
Lecture
Symposium
Panel discussion
Colloquy
Forum
Seminar
Tutorial
Mentoring

Demonstration

These can save time and talk. It is often easier to watch a demonstration than to listen to a verbal description. Explanations given are more concrete when linked to a demonstration.

Demonstrations provide models and standards for learner performance. They give the learner confidence when he or she performs adequately.

Demonstrations can be used with a variety of group sizes.

During the demonstration there is usually no learner participation.

There are two main approaches to demonstrations:

- Perform the demonstration at regular speed and then repeat it slowly (or part by part)

- Do it part by part, then the entire demonstration at a normal rate.

Students may be told what to watch for during the demonstration and the action may be stopped and their attention directed at critical points of the demonstration.

If a way **not** to do something is demonstrated, it should immediately be followed with the correct procedure.

There should be immediate learner practice after the demonstration (or part of the demonstration) and the encouragement of student questions and answers.

Effective demonstrations have to be prepared for and frequently rehearsed. Skilled demonstrators and assistants are required to watch the learners practise.

Lecture

Formal lectures usually have one-way communication, that is, one person (the lecturer) talks to a group (the students) for the duration of the lesson. All responsibility for the communication of information rests on the lecturer and the learners have no say in what is communicated or how it is communicated.

Presentation is pre-planned and usually content-orientated rather than objective-orientated (unless the objective is to inform the learners of the content). Emphasis is placed where the teacher wishes. A lecture is usually delivered within a predetermined time limit.

Lectures are efficient for passing on factual knowledge and simple conceptual learning. They are excellent for background information. They are very economic in terms of staff use and time. Facts and ideas are presented rapidly. Hence lectures are particularly popular if a lot of material has to be got through for examination purposes.

There is no limit to the size of the audience. Lectures can easily be recorded.

The effectiveness of lectures depends on the skill and personality of the lecturer. Difficulties for the lecturer are adjusting to individual speeds of comprehension, preparing for unknown audiences, and maintaining attention and interest when there is little learner participation or activity to maintain such interest.

Lectures demand the following of students:

- a retentive memory (research indicates that most lecture content is soon forgotten)
- listening skills
- note-taking skills (which includes speed in handwriting)
- the ability to follow the logical organisation of the lecture.

Because of the mostly one-way communication, formal lectures make it difficult for the learners to give feedback to the lecturer (except through body language, e.g. going to sleep, looking bored, etc.) and hence there is little direct check on what learning is taking place.

Formal lectures do not usually make people think or problem solve. Problem solving means using information and hence formal lectures should always be followed by discussion or tests or practical work in which knowledge can be applied. Alternatively, variations of the lecture form can be substituted - questions, quizzes with answer keys, buzz groups, seminars or forums. Formal lectures can be enhanced by visual aids, outlines, summaries, handouts, etc.

Lectures are very poor at changing attitudes and values compared with active group discussion.

It is often very difficult to get an educational institution **not** to use lectures, however inappropriate lectures are as a method. This is because of the social-ritual value of lectures.

The social-ritual nature of lectures

Howe (1973/74, pp. 222-227) has pointed out that, quite apart from considerations of learning as such, the lecture has value to all concerned by meeting needs that are of a broadly social, and partly ritual nature. For instance, for students, the lecture provides a context for learning in which mercifully few difficult individual decisions have to be made and in which there are few of the distractions that may be present when a student attempts to study on his or her own. Learning is a private, subjective matter in the main, and the student may feel isolated and lonely. The lecture can be regarded as having some attributes of a social occasion and one in which the student is reassured by the presence of others who share some of his or her problems and aspirations. Furthermore, we can regard lectures as fulfilling the function of putting learning on

display. It is apparent that the student is properly engaged in the business of leaning, that the teacher is meeting his or her obligation to communicate knowledge and that the institution is playing its role as a market-place for education. All those who are concerned with learning thereby receive some kind of concrete reassurance that all is well.

Symposium

A single event consisting of a number of short lectures from 2 to 6 speakers, who are chosen because of their knowledge about a subject.

No feedback is given and learning is done independently.

Panel discussion

A conversation between 3 to 6 persons, chosen for their knowledge and interest in a particular subject, in front of an audience.

There is little feedback to the panel and learners learn independently.

Colloquy

A modified panel discussion consisting both of persons with expert knowledge and of learners.

Often used at the end of a conference to enable the learners to bring up some outstanding issues for open discussion with the resource persons.

It builds up the confidence of the learners (or terrifies them) by encouraging them to put their questions and comment publicly to the experts.

The learners chosen to join the panel should be confident and able and have consulted the others learners about points to raise.

Forum

A lecture followed by open discussion.

A limited amount of group interaction, but mainly speaker-listener exchanges. Hence mainly independent learning takes place.

Panel, symposium, debate and colloquy forums are also possible. All of these encourage some two-way communication.

Tutorial

Tutorials can be for individual or groups. Usually it is a small group of students meeting with their tutor to engage in some discussion.

Even in the one-to-one situation, it is still the learner who does the learning. The teacher can only guide, inform, evaluate, provide feedback, etc. The benefits of the tutorial situation do **not** rest on the use of the teacher as a medium of primary communication. This is extremely wasteful.

Effective tutorials are based on prior learning that the student is expected to have achieved, on his or her own or in a group. New learning may take place during the tutorial by reinforcement or by restructuring of previous learning.

Tutorials for **reinforcement** of learning are those that diagnose the student's mastery of a certain body of knowledge, or of a skill, correct wrong interpretations, provide extra practice where this is required, complete the knowledge where this is incomplete and continue the process until the individual student has reached the specified standard of performance. As such, it tends to apply the mastery model of control of a student's progress. In practice, there are often time limits which prevent all students achieving equal levels of mastery, even with individual tutorials.

Tutorials for **restructuring** of learning are more concerned with the formation of useful conceptual schemata and with individual development than with predetermined objectives. In this form of tutorial the tutor does not follow a pre-set path but rather follows the path that develops from the conversation as it unwinds. The tutor does not show and tell, but seeks and asks for demonstrations and explanations from the learner. The tutor is the sounding board

against which the learner tries out his or her ideas. Often, the presence of one or two other learners enhances the value of the learning sessions.

Individual tutorial

It is difficult to imagine a more effective (and more expensive) system for achieving pre-set cognitive objectives. However, much of the opportunity for incidental learning through group interactions is lost.

Tutorials for **reinforcement** of prescribed learning may well be most efficient when a one-to-one tutor/learner relationship is maintained. However, this is usually ruled out by economic considerations.

Group tutorial

This has all the characteristics of an individual tutorial, but takes place in groups of two to five students with one tutor and has the benefits of group interactions that may offer better learning conditions than the one-to-one tutorial.

It should always be based on a prior learning assignment, which may have been individual, small group or large group based.

It may take the form of a **reinforcing tutorial**, as when time is devoted to problems encountered by the students in previously set learning tasks. In this case the tutorial may almost take the form of a mini-seminar, that is, with students presenting a case or argument for discussion to the rest of the tutorial group.

On the other hand, a **restructuring tutorial** in a small group becomes effectively a group discussion, though much more controlled by the tutor than by the group members. Cooperative problem-solving is promoted. Tutorials for restructuring of previous learning and for individual development of conceptual and problem-solving schemata benefit from the added richness and variety of comments and questions that small group learning affords.

Some types of small group tutorial

The 'Phillips 66' technique and derivatives.
Originally this technique involved groups of six learners who each had to address the group on a given topic for six minutes (hence '66'). Various modifications of this structure are possible, bringing elements of the **seminar**, the **symposium** and **colloquy** into the small group learning. It is an excellent way to start a restructuring tutorial. It may promote competition amongst the learners.

Small group projects and assignments.
This is a very important way of using the group as a self-instructional device. Highly specific learning assignments may be set, or very open ended problem situations posed. The emphasis is on the small group organizing itself in an efficient and cooperative manner to carry out the task. The common structure is 'cooperation within groups and competition between groups'.

Compensatory grouping.
This technique may be used with any of the above. It aims to balance the skills or other factors in a group by the careful selection of the members. Learning 'diads' (two members) or 'triads' (three members) are formed of members who complement each other and can therefore do much to teach each other. This is essentially cooperative.

Mentoring

Mentoring, is a one-to-one situation in which the mentor will work with the mentee to assist the student to reflect on his or her practice and to improve it. Usually a long term arrangement is implied, with regular meetings between a student and the mentor.

Mentoring is clearly becoming a more significant teaching method in education and training, the business world and religious institutions. There are three major components to consider when mentoring:

Support - which consists of listening, providing structure to the interaction, providing positive feedback to the mentee (i.e. the student or learner), sharing as much as possible with the mentee, and ensuring that the whole mentor process is seen as special.

Challenge - consists of setting tasks for the mentee to follow, engaging in discussion and debate, requiring the mentee to meet high standards that are set.

Vision - ensures that the mentee is able to see the full picture of their development and of the field and is provided with an inspiring role model.

Thus the mentor is seen (Jarvis, 1995, p. 120)

> to help the proteges to reflect on their experience, to learn from their experience and to improve so that they might gain more expertise.

Within mentoring, there are two schools of thought. One suggests that any mentor relationship needs to be defined and structured so that the mentor and mentee have a mapped out set of interactions. The other suggests that any mentor relationships can only happen if the chemistry between the two people is right.

Student-centred educational methods

These methods are especially important for adult education in that the students are adults, and bring to the teaching-learning environment their life experience. In this approach, the teacher is the facilitator of learning rather than the source of all knowledge. The teacher is often (though not exclusively) responsible for the creation of the learning situation, though he or she does not control the learning outcomes.

There are many different educational methods that can be used in the student-centred approach. Student centred methods can be divided into those used with groups and those used by individuals.

Student-centred group methods

The following is a list that does not purport to be exhaustive:

Brainstorming
Buzz groups
Case study
Debate
Fish-bowl
Group discussion
Interview
Listening and observing
Role play
Simulation
Seminar
T groups and encounter groups
Visits, tours and field trips
Workshops

Brainstorming

The rules for brainstorming are simple:

- Agree on a period of time to 'brainstorm' ideas on a particular issue or problem
- All members of the group to offer their ideas
- All ideas are to be noted
- No idea is to be criticised, rejected or debated
- At the end of an agreed period of time, all the ideas are analysed
- Group to reach agreement on some of the ideas that seem most appropriate for the particular issue.

From these rules, you will gather that this educational method is ideal for a group which wishes collectively to generate ideas or solutions to a problem. It is a method that offers a quantity of ideas and does not consider their quality until after the brainstorm.

The next phase is that of processing the ideas generated and reflecting on their appropriateness for the particular issue or problem.

You need to note that the strength of this method is that it encourages all members of the group to offer their ideas, not in the superiority of the ideas collected by this method. There is little empirical evidence to suggest that the quality of ideas collected by brainstorming is superior to those made by individuals working on their own!

Buzz groups

Usually a group of 2 or 3 people seated next to each other in a formal setting, e.g. a lecture, who briefly discuss some point.

Buzz groups are especially useful in a lecture when there is often little response to a request for questions. Buzz groups are formed to discuss the lecture for a brief period and decide on what questions to ask.

They can be used to break up long sessions.

Students tend to listen to lectures more attentively if they know they will go into buzz groups.

Case study

This is usually run as a kind of discussion group and focuses on problems common to the group. A 'case', real, or invented or simplified, is presented to the group and they must provide a solution. It aims to give experience in the sort of decision making that the learner will have to do later.

It is often useful to abbreviate a real case, in order to present the aspect of interest uncluttered by other irrelevant information. If this is not possible, one may invent a simple case in order to illustrate one's point. The problem is to decide what to leave out in order to simplify the case study for the learners. There are dangers, however, in the oversimplification of a case, which may lead to loss of realism. An oversimplified case will appear to have a unique 'best' solution whereas in reality other factors complicate the issue, so that there is no 'best' solution but merely positive and negative aspects to any one of several reasonable solutions. If real life demands the taking of decisions on the basis of incomplete data and in the face of uncertainties, the case study should simulate this incompleteness and uncertainty.

Discussion may be free or guided by the teacher, often according to some formal pattern (which may have been outlined before) e.g. identification of problem, statement of problem, possible solutions, examination of solutions, selection of solutions, implementation and evaluation methods, etc.

The teacher or leader has the role of presenting the basic case description and some of the data. The leader may withhold other data, in certain cases, until the learners discover the need and ask for it.

Though the leader may intervene to review progress, prompting or questioning the approach adopted by the learners, he or she should not suggest an approach or assist in actually solving the case. The leader acts more as data bank, referee and critic than instructor.

The debriefing session is very important and should engage the learners in self analysis: 'We have considered the case presented to us and come to certain conclusions; now let us consider the case of ourselves. How did we attack the problem? How could we have attacked it? What can we learn of general application concerning our approach to case studies?'

Debate

This is a useful method of presenting learners with opposing views on a particular issue. It is also useful in that it can offer participants who express opinions some protection by virtue of the debate being a staged performance.

An extension of this method is the 'voting with your feet' debate. All learners are seated in the centre of a teaching room. The two people debating then stand on either side of the group and present their arguments. The learners in the centre of the room need to move to either of the people debating if they want to contribute to the debate. Learners can move over to the opposing side if the arguments are compelling. It is also possible for learners to move to either side and not say anything.

Fish-bowl

The standard format for this method is to have a group of learners in the centre debating and discussing an issue. There is another group of learners that sit around them on the outside. They keep silent and observe the debate. The outer group observe the interaction of the inner group and provide feedback during the general plenary discussion. This method is useful for observing group dynamics.

A variation of this method allows the members of the outer circle to become part of the discussion. They can tap the shoulder of their fellow learner (who is within the circle) and exchange places.

This is a useful variation in that it allows many people to participate as wish to while all learners are close to the process to follow the debate.

With this method, it is useful to place a time limit. This will allow the learners to discuss some of the insights that they might have gained from observing the interaction and/or by participating.

Group discussion

Two things have to be considered when deciding on a group discussion. These are:

- Group size (how many learners work together)
- Group interactions (how the learners work together).

The group size is dictated both by the interaction desired and by a host of practical and economic factors, many of which might be beyond the control of the educational designer.

Usually the decision to have group discussions is a trade-off between the theoretically desirable and the practically feasible.

Types of group discussion

These can be of various types

Free discussions allows the students to choose the topics and gives the teacher a good idea of what topics really interest the learner.

Directed discussion keeps to a teacher selected topic and the teacher may well act as the leader. Prepared questions are used to stimulate critical thinking.

The main point of group discussion is that learning occurs through the interchange among the group members. The learner can check his or her ideas with those of others.

Discussion encourages learner activity and gives the learner a sense of responsibility for learning. It helps students to feel free to take the initiative and participate and can build up their self-esteem of the participants because each person's contribution is potentially worthwhile. It allows the experiences of advanced students to be shared. It can also have the opposite effect and be intimidating to learners.

It is a mature, cooperative way of learning and is particularly appreciated by adults.

Group discussions are useful as a means to draw people out of passivity, for chancing attitudes and problem solving. It increases student commitment, unless they withdraw.

It may help participants realize that their problems are not unique and that they have assets and skills.

They provide automatic feedback. The other group members register whether what is being said is clear and understandable.

The teacher can lead the group or simply be a group member (though such participation must be genuine and accepted as valid by the group).

A teacher who leads group discussion needs to be skilled in group dynamics, who encourages cooperative rather than competitive interactions. He or she needs to be able to summarize skilfully, remembering who contributed the main points, be able to think quickly, adapt, accommodate, be able to predict student response and build upon this, and to be prepared to learn the background of the students.

A problem for teachers is the desire to intervene when false information is introduced and accepted by the group. Ideally such intervention is best done not by a 'lecture' but by subtle questions.

Although group discussion maintains interest and avoids monotony it is very time consuming and may require lengthy preparation of questions, handouts, and back up aids in case discussion lags. Discussion also depends on learner capacity and mood for participating. Students may have to read or otherwise prepare in advance.

Role play

Role playing, or socio-drama, is most commonly used for social and human relations education. The purpose of role play is to put learners in a simulated social relationship with a view to:

- Widening their understanding of a particular problem or situation, or
- Changing their attitudes, or
- Practice skills.

Role plays rely on and develop the learner's interactive skills.

They are related to case studies, but they involve individual human beings and their behaviour or interaction is dramatised. The

learners may participate as role players or as observers, depending on the objectives of the particular application. Each role player temporarily assumes and plays the role of another individual. In assuming the role the learner tries to feel like, act like, and sound like the individual the learner is attempting to portray.

The leader presents a situation, e.g. a conflict between a matron and a nurse. Participants then act and each player reacts.

To add realism and entertainment, each player may be given a description of the character they are playing, e.g. You are a very efficient but bad tempered matron.

The learners may, by contrasting different role-plays, see a subordinate person reacting rebelliously to bullying by a senior, or they may see respect from a junior in response to respectful behaviour by another senior person. Such an experience is more likely to change attitudes and behaviour than a lecture on how to treat one's subordinates.

The purpose of the role play is not in itself to solve problems, but to provide data for subsequent group discussion or identification of behaviour. (Note that a skit is often confused with a role play since it too can demonstrate behaviour for discussion purposes. The difference is that a skit is determined in advance and a script is usually written out and rehearsed.)

Also, the aim of role playing is not to develop expertise in acting and, generally speaking, as many learners as possible should be given the chance to go through a role play.

Three common patterns are:

Single role play: The majority of learners observe whilst the play is enacted. This is characteristic of socio-drama, aimed at forming attitudes and values.

Multiple role play: The learners are divided into groups. Each group enacts the play so that all learners are participants in one role or another.

Role repetition: The key role (say of an interviewer in an interviewing skills exercise) is taken by all learners in turn. Learning occurs through performing, observing and comparing performances. Good for interactive skills.

Role playing may be employed to promote four types of learning:

1. **Learning by doing:**
   The learners act out roles they will have to take in reality later on. This may be aimed at the development of interactive skills (such as interviewing or supervision) or for learning what it feels like to be in a particular role.

2. **Learning through imitation:**
   The observers of the drama identify with the actors and how they behave.

3. **Learning through feedback:**
   During the debriefing the observers comment on the performance of the role players. This may promote the learning of the cognitive procedures and principles which underlie the performance of the skill.

4. **Learning through analysis, evaluation and repetition:**
   The participants may perfect their skills by repeating the role play and debriefing cycle.

The instructor, or leader, has an important function to play at the beginning of the exercise, explaining the roles and the precise objectives of the exercise. The leader should also try to dispel nervousness and create the right climate for playing without embarrassment.

Role play should always be followed by discussion to explain and thus provide reinforcement to the experience gained in the role playing exercise. The leader may supply feedback of a constructive nature and lead the debriefing towards useful generalised conclusions.

It is essential that players be de-roled. This is particularly important on emotive issues. Unless de-roled, participants may level destructive criticism at each other. The participants must be brought out of their role. Sometimes this needs to be done in a ritualistic way.

Simulations

A dictionary defines “simulate” as “to give the appearance or effect of.” A simulation is an imitation or representation of something else, an operating model of a physical or social situation. In simulation, reality is reduced to manageable proportions. What in real life may be an extremely complex situation is simplified and condensed; non essentials are omitted. Thus a simulation is an imitation or a representation of an actual physical or social situation reduced to manageable proportions to serve a specific purpose. Simulations are usually also games, involving many of the elements which we associate with other kinds of games: there are goals to be achieved, rules to be observed, usually some form of competition - and they are fun to play!

It is not always possible or convenient to let learners experience ‘the real thing’, at least in the early stages of a programme, e.g.. a new life support system for an Intensive Care Unit. It is often necessary to simulate real life conditions so that the learner can experience the result of his or her mistakes and errors of judgement (and learn to avoid them) without damaging him or herself or others. Another benefit of simulations is that although the characteristics of the real life situation are retained, ‘time’ may be compressed so that results of discussions which normally appear after weeks or months may be examined in a few hours.

The two essential elements of simulation games are that they are simulations and that they are games. If they do not simulate some form of reality, or do not have the usual elements of a game, they are ‘exercises’.

Hence a simulation game is a series of activities in a sequence in which players participate in a “simulation” which :

1. Has stated rules
2 Usually involves competition
3. Leads towards an objective.

Simulations are useful for problem-solving, planning and decision making tasks. Real or invented situations and data are presented to the learners, who adopt the roles of the decision makers or planners.

Simulations are also useful for giving learners the opportunity to see and feel problems from the viewpoints of other social groups.

Examples of simulations are board games (such as ***Monopoly***), role plays, case studies, and psycho-motor simulations such as flight simulators and computer games. Some games combine various of these techniques.

Board games are built around a game board on which most of the action takes place. By the end of the game, players have seen the course of development graphically represented on the board.

Role play games teach processes involving negotiation, bargaining, compromise; in general, human interaction. A scenario, that is, a briefing of the situation up to the moment of the game, sets the scene for the action, and each participant has a specific role to play. This may be clearly set out in a role profile, that is, a description of a specific player's objective, rationale, and resources, with helpful hints towards strategy, or left to the individual to develop from a broad general outline.

The purpose of simulation games

Conflict and chance are part of life. How can we confront and deal with conflict? How can we anticipate the effects of possible change? Games can help us to do both these things.

A game may thrust us into a conflict situation - perhaps one that we would try to avoid in real life. In the game there is no escape. We have to come to terms with the situation and the other people involved. We have to make choices and decisions. And we have to live with the results of those choices.

What games provide, perhaps uniquely, is the opportunity to deal with complex problems in concrete ways. Often a game enables us to quickly get the 'feel' of a situation in a way that would be impossible for us in real life. And because the game reduces reality to manageable proportions, we are able to act with a greater sense of purpose and understanding.

Games also provide opportunities for experimenting and taking risks. They allow us to try things out: different behaviour, new solutions to familiar problems, different ways of organising our simulated environment.

Each game has its own specific purposes, but generally the purposes of simulation games include helping learners :

1. To become aware of existing views on an issue.

2. To understand the social, political, religious and economic aspects of the situation.

3. To understand the feelings of those in the situation.

4. To analyse possible outcomes, or actual historical ones.

5. To generalise factors and apply to other cases.

The most vital part of the learning process in simulation games is the evaluation at the end; the 'debriefing', 'de-roling' (the period at the end of the game when players drop their roles and become themselves again), or postmortem period. It is at this point that most of the real learning takes place. The two key questions are:

- What decisions were taken during the game?

- What were the effects of these decisions on the game?

The educational value of simulation games

1. Most games demonstrate the advantage of co-operative effort (though a strong competitive element is often involved).
2. They develop empathy, with the possibility that the player will develop sensitivity to and understanding of the person whose role he has assumed.
3. Games help develop the ability to analyse the essential elements in a situation.
4. Games provide a chance to experience the situation, not merely to hear or read about it.
5. Players learn that there is a causal relationship between their behaviour and the outcome of events.
6. Games allow for feelings to be expressed, even hostile ones. This is a good way for people to express what they feel within themselves even though they might not be able to articulate it in a formal meeting or situation.
7. Players can explore the possibilities of affecting (changing) their environment.

8. Players are involved in relevant inquiry, questioning values in a non-threatening atmosphere, thereby learning to think critically.
9. Games provide high motivation for learning.
10. Players may gain insight into their own behaviour and their relationship with others (thereby assisting in personal growth.)
11. Consequences of decision can be immediately observed and evaluated.
12. Players learn to take responsibility for their own decisions and actions.
13. Games provide a non-judgemental learning experience. At least, the players are not judged externally. Everyone learns from the experience, losers as well as winners.
14. What counts is actions, deeds, moves; not rhetoric unacceptable statements, vows or promises.

Disadvantages of simulation games

Criticism has been levelled at simulation games on the grounds that they:

1. Oversimplify.
2. Fool players into thinking that they know all there is to know about a given topic,
3. Allow players to manipulate the lives of others without being affected by the constraints of real life.
4. May have the 'life-likeness' of a situation heightened or marred by the personalities of the players.
5. May have only a short-lived effect on the attitudes and life-style of the players.
6. Could teach the advantages of unscrupulous self-interest.
7. Work upon the emotions (that is, 'simulate') to such a point that players become over-involved.

While these criticisms may be valid, they may be applied equally to other learning approaches. Certainly we ought to keep them in mind lest our enthusiasm for games blind us to possible drawbacks.

The use and misuse of games

One of the dangers in using simulation games is that they can become interesting ends in themselves. We decide to include them in the programme because it is available, rather than because we believe that it will help us to come to grips with an important issue. We misuse simulation games when we treat them as novelties or interesting programme fillers. Our decision to use a particular game should stem from a concern for the issues with which it deals, not because it 'sounds like fun'.

While most games are suitable for 'single-shot' programmes, their most effective use often comes when they are used as part of a broader programme.

A game might be used to introduce a topic which the group will be studying over a number of weeks. You would expect the game to acquaint the participants with the broad outlines of the problem at hand, and to motivate them in a desire to become more deeply involved in studying the issues and in seeking solutions. Alternatively, a game might be the culminating activity of a programme, pulling together the elements that have gone before, and bringing home the implications of what they have discovered.

Directing a simulation

In all simulation games, the game director (the person in charge of the game and responsible for its proper functioning) plays an important part. He or she must be thoroughly conversant with all phases of the game being played; its purpose, its schedule (that is, what happens next), the roles of the players, the type of interaction that will take place, the points at which conflict is to be expected, the likely outcomes, the probable learning.

It is important that the director remain 'outside' the game in the sense that he or she does not take part as a player (although in some games the director may be required to act as banker or messenger). The functions of the director are to direct, and to be aware, at all times, of what is going on.

The director's function may be described in three phases; briefing, guide, and debriefing and evaluation.

1. **Briefing:**
   The director first of all introduces the game, explains as much as needs to be explained of its purposes, assigns roles, distributes and interprets materials, and answers questions for clarification. This demands a thorough knowledge of the game and its purposes. Instructions should be clear and to the point. The director should know which questions are to be answered, and which should be left to be answered by the game itself.

2. **Guide:**
   It is vital that the director knows what is happening at all stages of the play. He or she should be particularly aware of any conflicts that are building up. Conflict is a part of the game and usually serves a good purpose, but a game may be cut short if the situation is getting out of control.

   In most cases the director is also responsible for the timing of the game. All prearranged limits should be strictly observed. A director who is well up with a game may sometimes decide to help the action along a little if it appears to be lagging. This can be done by introducing new material in the form of a message to one or more players. (Some games make provision for this by providing special materials. An alert director can do it by devising his or her own special input.)

3. **De-briefing and evaluation:**
   It is the director's responsibility to help the players at the end of the game to sort out and assimilate their experiences.

   The first step here is to de-role the players. They are no longer allowed to be the characters whose roles they assumed. Name tags or other distinguishing marks are removed. The players are themselves again. The director should take care that if the game has created hostilities, they are not permitted to spill over into the evaluation period.

   Most game instructions set out the kinds of questions which may be used to draw out the players' experiences. The most important ones involve what happens in the game and why.

   Players should be encouraged to talk about their feelings, frustrations, and decisions, and also about what they could have done to improve their role performances. Finally, it is important that the players be helped to transfer their experiences in the simulated situation to the real situation.

Seminar

The learners should have previously researched and prepared a topic. The topic, usually chosen by the teacher or at least approved by the teacher, is then presented in the form of a mini lecture to the group by the researchers. It may be an individual or cooperative project.

Group discussion then follows and the group, guided by the teacher, comes to a conclusion. Much of the responsibility for learning and instruction is delegated to the learners themselves.

T-groups and Encounter groups

This educational method is based on individual group members discussing their interaction and relationship with each other and using this to become aware of interpersonal relations, individual awareness, sensitivity training, self-awareness and leadership functions in the group..

Such groups stress openness and emotional honesty. They are a very powerful educational (and at times therapeutic) method. However, this very power can result in disharmony within groups and this can lead to serious problems between learners, even after the group has broken up. It can also be very damaging to the individual's self-esteem and therefore the method needs to be handled with extreme caution. It requires a skilled and ethical trainer or leader.

Visits, tours and field trips

Taking learners on visits, tours and field trips are an important part of many adult education events. Such trips provide the learner with personal experience of real situations, and also provides the group with a common learning experience and this can become a resource for further learning. After such trips, a debriefing session is necessary in order to reflect on the visit and the learning that has occurred.

There are some limitations to using, this method (Jarvis, 1995, p. 131):

> Such visits can take a long time to organise and may be relatively expensive, they may preclude some people from participating in them, especially the handicapped or those who are extremely busy with many different activities, they may have to organise in conjunction with another party, and thus the tutor may not be totally responsible for the arrangements of the learning activity.

Workshop

Workshops generally have a practical applications aspect. The workshop leader or leaders may present information, procedures and principles by any instructional methods. Under supervision the participants apply the new information to a real task. The skill is practised on problems or tasks of special interest to each individual member or sub-group.

The leader is also responsible for arranging materials, support services and equipment.

The atmosphere is informal and an important objective is that participants learn from each other.

Report backs are usually required so that all the participants may share their results and receive reinforcement for their new learning.

Student-centred individual methods

The following is a list of some of the main methods :

Assignments
Computer Assisted Learning (CAL)
Learning contracts
Experiential learning
Individualised instruction
Practicals
Self-directed learning

Assignments

Assignments are common features in courses and can consist of writing an essay, a case study, a research project, or may require the learner to produce, for example, a teaching aid for a particular course.

Assignments in written form are perhaps the most common for communication of some form of research. This educational method works on the assumption that learners are proficient in the use of this medium. Using this medium may require tutors to diagnose their learner's writing skills and if necessary, provide options to allow learners to acquire the necessary skills.

Although requiring students to produce assignments is seen as a learner-centred educational method, it can also be viewed as a teacher-centred educational method. This depends on who sets the title of the assignment. It can be set by both the learners and the tutors.

The advantage of the teacher setting the question is obvious. Teachers can ensure that the questions cover the whole course syllabus and that the standard of the questions asked is similar. This will help in assessment of the assignments. Yet it needs to be stated that assessment is a subjective process, "affected by many variables, including handwriting, length and writing style." (Jarvis, 1995, p. 133).

Other variables include the fact that many teachers or tutors have little or no training in grading or assessing an assignment. They therefore might not be competent to assess both the structure and content and not be able to set some standard against which the assignment is judged.

Tutor comments on the learners' assignments is a key factor in the learning cycle. Learners often use the tutors comments to reflect on their work. Thus the assignment must be seen as yet another medium through which teachers and learners engage in a dialogue.

Encouraging learners to select their own topic also has a few advantages. They would choose areas of study that are relevant to their learning needs and/or of interest to them. A potential problem with this approach is that learners may have the tendency to choose areas of study that they are familiar with and hence be less inclined to study new areas.

Computer assisted learning

The use of computers, tablets, smart[hones, etc. as an educational method is now extremely popular. Often older adults find using computers a daunting task as they have not been introduced to it at an early age. There is a huge range of programs both for purchase and freely available on the Internet that offer learners a chance to learn a variety of subjects. However, the lack of personalised contact with tutors may prove a hindrance to many learners.

Learning contract

This approach works on the basis that learning is an individual process and therefore is subjected to different experiences, different motivations and different constraints that learners have. A learning contract is seen as an agreement, covering, a range of areas, between the learners and tutor. It could cover aspects like the aims and objectives of the learning, the resources needed, the time frame for the learning, the mode that will be used to assess learner outcomes, the number of contacts between the learner and tutor, etc. This is an extremely useful method of teaching, but can become time consuming if your classes are large.

This method is particularly useful in that it makes learners aware that they are not just vessels that are filled by the tutors, but that they are an integral part of the learning-teaching interaction and this requires will and action on their part.

If the contract, in either a written form or as an informal agreement, cannot be kept, then it is the responsibility of the party that breaks the contract to renegotiate the terms.

Self-directed learning

This educational method fits neatly within an adult education framework. There are a number of characteristics of self-directed learning, i.e. the student determines the aims of study, has the freedom to choose a method of study, is prepared to act on the method, and to completed a set piece of work.

However, Candy, quoted in Jarvis (1995, p. 139) suggests that a learner is never free if they are operating within an educational institution. He suggests that there will always be some influence by the tutor or by the institution. He goes further to note two forms of self-directed learning, autodidaxy and self-directed learning. Autodidaxy is regarded as self-directed learning that occurs outside the educational institution, for example, learning to operate a video camera by using the manual.

Individual project

The learner is given a task and set objectives by the teacher, perhaps after a process of negotiation. The teacher may suggest means for reaching these objectives. It is up to the student to locate and organise the learning resources she or he will require.

The individual project allows for variations in individuals and is flexible in timetable and curriculum. It helps train people to learn independently and to use their own judgement.

Feedback is individual, but usually occurs at the end of the project.

The project method requires adequate resources, e.g. textbooks, libraries, and the skills of using them independently.

Teaching Aids

Teaching aids and equipment, like educational methods, are important components of any adult education interaction. Jarvis (1995, p. 142) notes that:

> a wide variety of aids and equipment are available and the teacher is able to enrich the learning experience if some of the techniques are employed in the teaching and learning situation. It is, therefore, the responsibility of teachers of adults to be aware of what provision is made by their own educational institution and by other institutions so that they are able to perform their role effectively.

There are a wide variety of aids and equipment ranging from the basic and non-electric (chalkboard, whiteboard, flipchart, feltboard, board games, and various charts, photographs and printed books, articles, handouts, etc.) and electric (audio-recordings, radio, television, data projector,computers, etc.)

Such a variety of teaching aids and equipment is helpful in that students are able to learn according to their own learning style. While using a variety of aids can help the learning process, it needs to be noted that using too many aids during a learning event can be detrimental to learning. Tutors should avoid using a teaching aid just because it is available, and particularly if they are not familiar with the use of equipment..

References

Bloom, B.S. *et al*. 1956. ***Taxonomy of educational objectives. 1: Cognitive domain***. London: Longman

Curzon, L.B. 2003. ***Teaching in Further Education : an outline of principles and practice***. Sixth edition. London: Continuum

Howe, M.J.A. 1973/74. *The utility of taking notes as an aid to learning*. ***Educational Research***, Vol. 16, pp. 222-227

Jarvis, P. 1995. ***Adult and Continuing Education: theory and practice***. Second Edition. London: Routledge

Laird, D. 1978. ***Approaches to training and development.*** Massachusetts: Addison-Wesley

Renner, P.F. 1983. ***The instructors survival kit - a handbook for teachers of adults***. (Second Edition). PFR Training Associates

Romiszowski, A.J. 1981. ***Designing instructional systems***. London: Kogan Page