Dunn (1996) describes seven learning styles traits that discriminate between high-risk students and dropouts, and students who perform well in school. Dunn argues that a good instructional model to reduce drop-outs and problems in the learning experience should allow for:

- the students to be able to be frequently mobile
- Decisions of how, with which resources, and with whom to learn
- Different instructional environments and social groupings rather than routines and patterns
- The possibility to learn during late morning, afternoon, or evening hours depending on personal preferences.
- No formal seating arrangements.
- Soft illumination of the learning environment
- Introduction to materials with kinesthetic or visual resources, followed by a reinforcement with with visual or kinesthetic resources; or an introduction to materials with kinesthetic or visual resources, followed by a reinforcement with visual or kinesthetic resources. This is a kind of using mis-matching learning styles to make learners 'better' learners.

Of course, all the points mentioned above would not be in particular relevance to ODL environments. However, these give us an indication of the importance that contextualisation of learning content based on information received from a learner profile can have in the success of the learner in a particular course. One of the main problems that ODL systems have been facing was the high rate of drop-outs. While research has shown that there are a number of factors that contribute to this phenomenon, the problem is also attributing to a lack of personalisation of those environments. This is related to the fact that most material are generic and may not be accomodating for the varying preferences of the learners.

There are a number of different instruments that are available to measure preferred learning and cognitive styles of learners. This variety of instruments available and the 'lack' of consensus and standardisation of the instruments have given rise to criticism from different researchers and educators. The validity of these instruments have also been questioned by some since they are mainly self-report activities carried out by the students that will in cases be subjective rather than done in an objective way. However, despite these criticisms research in this area is still ongoing.

Some of the main learning/cognitive styles instruments that are available are the:

1. Honey and Mumford Learning Styles
2. Dunn and Dunn Learning Styles
3. Kolb Learning Styles
4. V-A-K (Visual - Auditory - Kinesthetic) Cognitive Styles

The constraint that is posed by these learning style instruments in the context of ODL is that it is difficult to get the students fill in these forms and submit these to you at the time of writing. Furthermore in each batch of student, these information will vary. However, once an educator gets to know about these preferences, these will have an impact on the way you shape the learning support (discussed in a different unit).

However the broad idea here is to make you aware of the different preferences of learners and that you need to desing ODL materials in such a way that it accomodates different types of learners.

## Activity

Write down the four media that are available and short notes how you would use each of them to cater for a learner with different preferences. You may carry out a brief Internet search on the V-A-K cognitive style

The V-A-K instrument has been developed by Barbe and Milone (1980) and describes the learner as visual, auditory and kinaesthetic. Persons with a visual preference tend to show a greater ability to analyse and integrate visual information, mentally convert non-visual information into visual, and show superior retention of mental images (Ayersman and Minden, 1995). An auditory learner, on the other hand would prefer to process information in the form of verbs and, either written or spoken (Jonassen and Grabowski, 1993). Kinaesthetic learners prefer to process information through tactile means such as interactive media.