

# **A Progressive Hybrid Assessment Model in Open Distance Learning**

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## ***Abstract***

The current concern about assessment method of open distance learning (ODL) focused on institutional or teacher's perspectives. However, ODL is learner-centred and learner-controlled. The learners are the one who decide on what, where, when and how they would like to work through the instructional materials. Therefore, any assessment method should also incorporate some elements of student-centredness. This paper proposes and presents a progressive hybrid assessment model in ODL. The model not only emphasizes on summative and formative assessment, but also concentrates on the learners' needs and expectations. First, this paper analyses current trends of research on ODL assessment methodology. Then, it presents an assessment model called FAHAM (Four Aspects of Hybrid Assessment Model) to describe the learners' needs based on Maslow's hierarchy of needs. Finally, this paper presents a checklist based on FAHAM model from the beginning of the teaching and learning process on understanding and articulating in advance of the planning of assessment method.

## **Introduction**

Assessment can be used for summative and formative purposes. The summative assessment provides evidence for public reporting and to determine the status of learning. It is institutional- and teacher-centred. In a broader context, formative assessment serves another equally essential role. It enables both the teacher and the student to identify the latter's weaknesses in the subject area covered in the assessment. It helps learners to learn more and to promote greater learning (Stiggins, 2002). Although formative assessment has been much talked about and researched into, it remains a fact that most assessments are oriented towards summative purposes. To the student, assessment is often perceived as formal, judgmental and usually initiated, conducted and interpreted by those in power (namely teachers and the college).

This perception and its wide-ranging implications certainly would not facilitate adult learning via the open distance learning (ODL) mode. ODL affords the learner flexibility and independence. The learners are the one who decide on what, where, when and how they would like to work through the instructional materials. The learners have greater influence on all aspects of the ODL educational experience. They express their satisfaction with course rigor and fairness, with professor and peers' interaction, and with support services (Bishop, Swan, Brey, 2004). In this respect, assessment should be made to play an effective role in facilitating the student's learning. Besides providing summative functions to the institution and the teacher, assessment is an important tool for learners to identify their weaknesses in the subject matter, learning methodology, time management and so on. In short, there is always a gap between the institutional needs with the learners' needs and expectation in measuring the learning effectiveness and learners' satisfaction. Ignoring the gap implies the lack of concern for the learners' needs in improving the soft skills (E.g. the learning skill, time-management and so on) and the hard knowledge (E.g. specialized knowledge in a particular domain). As most of the open distance learners are matured and working adults, this particular aspect should not be overlooked.

The impact of lower priority in related to adult learners' needs should be concerned in order to provide a more effective learning process as well as a marketable education programme.

Misdiagnosis of learners' needs, learners' misunderstanding of their own ability to learn and miscommunication about learners' progress are examples of harmful consequences for ignoring the learners' needs in the assessment process (Stiggins, 2002). Furthermore, adult learners have a wealth of positive experience, which can be harnessed to generate interesting and dynamic debate. At the same time, they can also arrive with anxieties, which if not managed correctly can impair the learning process. These anxieties may be the legacy of their prior experience of education or of an extended absence from an education environment.

"Not only is the profile of today's student body different, but the life experiences that shaped today's students are quite different from those of previous eras" (Bishop, 2004). Adult learners want flexibility, convenience (Sener and Humbert, 2003) and satisfaction correlated with interaction, feedback, and clear expectations (Shea, et al., 2002; Bishop and SchWeber, 2004). The learners who reported high level of activities in their learning are more satisfied with the course (Swan, 2004).

In order for assessment to serve as a more effective learning tool for adult learners on the ODL mode, it is proposed here, that the learners' needs and expectations has to be more systematically incorporated into the assessment considerations. A model, known as FAHAM (Four Aspects of Hybrid Assessment Model) is put forward in this paper. We begin by providing an overview of summative and formative assessment, and examining learners' needs and expectations using Maslow's hierarchy of needs. A progressive hybrid assessment model is then proposed. This paper ends with a sample checklist of FAHAM when planning for an assessment.

### **Current research trends and focuses**

Research activities related to assessment in the early 70s, focus on summative and formative approaches. These two terms emanate in 1967 from Michael Scriven, an academic who has made significant contributions in the fields of educational evaluation. According to Scriven (1991), "When the cook tastes the soup, that's formative; when the guests taste the soup, that's summative." Summative assessment is comprehensive in nature, provides accountability and is used to check the level of learning at the end of the programme; formative assessment is often done at the beginning or during a programme, mainly to improve quality of learners' learning and should not be evaluative or involve grading learners (Angelo and Cross, 1993; Bardes and Denton, 2001). Therefore, they are research-oriented and as a basis for improvement intends both the approaches (Scriven, 1996; Weston, Mc Alpine, and Bordonaro, 1995; Worthen, Sanders, and Fitzpatrick, 1997).

After the year 2000, there is an increase of awareness when more research efforts are related to the subject of learners' needs and expectations. The research is first related on the measurement of the learners' satisfaction (Swan, 2001; Shea et al., 2002; Thurmond, Wambach and Frey, 2002; Sener and Humbert, 2003). Then, research on needs assessment has been carried out in various fields and for adult learners (Pamela and Barbara, 2005; Boon, 2005; Flint, 2005). Some organizations such as University College Dublin (2006) have even identified list of anxieties of adult learners.

Following the year 2004, there is an active research effort in online assessment (Bishop, Swan, Brey, 2004; Bishop 2004; Pamela and Barbara, 2005). Some researchers called the online

assessment system as the web-based testing system (Guzmán and Conejo, 2005). Computer or the online system has been proven to be effective in helping to possibly avoid the vagueness in assessing the learners' needs. For examples, Hwang, Yin and Yeh (2006) use algorithmic approach to generating testing sheets and Economides (2006) has researched on emotional feedback in computer adaptive testing. In short, the shift of the research activities on assessment is from summative and formative assessment to learner-oriented.

### Assessment for grading vs. for learning

As mentioned earlier, there are two common assessment approaches. They are summative and formative assessment. Summative assessment is also known as assessment for grading as it is used for external purposes (Stiggin, 2002). Formative assessment, on the other hand, is known as assessment for learning because it provides feedback to the learners. It can be used to highlight areas for further study and improvement (McAlpine and Higgison, 2001).

According to Holmberg (1981), formative evaluation is concerned with evaluating how well the course helps learners to attain their objectives of study and how it corresponds to their requirements and expectations. Formative evaluation does not aim at passing judgment but is a component of the development work. The findings of evaluation are meant to influence, modify or radically change the course presentation and study procedures. A comparison on the both conventional assessment was presented in Table 1.

**Table 1. Classroom Assessment Techniques**

Formative	Summative
Diagnostic	Final
Non-Judgmental	Evaluative
Private	Administrative
Often Anonymous	Identified
Partial	Integrative
Specific	Holistic
Mainly Subtext	Mostly Text
Suggestive	Rigorous
Usually Goal-Directed	Usually Content-Driven

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### Learners' needs and Learners' expectations

Maslow's hierarchy of needs (1954) has become a classic model of classifying different levels of human needs. The first two levels of needs are rather basic. Beyond physiological needs of hunger and bodily comforts, humans required safety in the forms of security in health, employment and family. As shown in Table 3, there are three other levels of needs in the form of love, esteem and actualizations. We draw upon a survey on why learners select online courses to identify ODL learners' needs and expectations. From the table, we are able to extract criteria and factors that can be classified into different levels of learner needs and expectations. For example, it can be observed from Table 2 that the reputation of the programme is the most important criterion when choosing a distance programme. This is then classified into fourth level of Maslow's hierarchy, which is esteem: need to be respected, self-respect and to respect others.

**Table 2: A survey on understanding why students select online courses**

What are the most important criteria when choosing a distance programme?	Number of responses	%
The types of technology utilized in the programme (video conferencing, email, etc.)	156	8.6
High level of interactivity between professors and students	349	19.3
Reputation of programme	591	32.7
Access to video content (lectures, labs, resources)	39	2.2
Access to non-video electronic content	8	.4
Personal referral	21	1.2
Affordability	308	17.1
Length of time for degree completion	240	13.3
Other	62	3.4
No answer	32	1.8
<b>What is your primary deciding factor between a campus-based and distance programme?</b>		
Availability	279	15.4
Affordability	373	20.7
Convenience	501	27.7
Reputation of programme	337	18.7
Length of time for degree completion	179	9.9
Portability	30	1.7
Other	36	2.0
No answer	71	3.9
<b>What was the primary reason to pursue a degree through distance education?</b>		
Variety of graduate programme available	24	4.4
Ability to work independently	146	26.6
Flexible hours	221	40.3
No local on-campus alternatives offering programmes in my field	102	18.6
Other	44	8.0
No answer	12	2.2

Sources: Shay and Rees (2004)

**Table 3. Maslow's hierarchy of need**

Level	Need	Description of the Needs
I	Physiological	Hunger, thirst, bodily comforts, etc
II	Safety	Security of employment, Security of revenues and resources Physical security – safety from violence, delinquency and aggressions Moral and physiological security Familial security Security of health
III	Love	Friendship Having a family
IV	Esteem	Need to be respected, to self respect and to respect others
V	Actualization	Self actualization Self-transcendence

The second column in Table 4 shows the list of the most important criteria for an ODL programme selection. The most popular reason for choosing an ODL programme is on the importance of reputation and ability of work independently. Learners seek programmes that their employers and colleagues will recognize and respect. This reason actually fit into the second highest level of learners' needs and expectations. Then, the other important criteria seems to fulfill the level three and four in term of love and esteem where the learners prefer a high level of interactivity between professors and students. Affordability, convenience, availability, length of time for degree completion and flexible hours are the other reasons for the selection. These are regarded as lower levels of needs on safety. The research shows that learners choose ODL due to the need of self-esteem. This is followed by love and safety.

**Table 4. Maslow's hierarchy of needs compared with the reasons for ODL and needs in ODL**

<i>Level</i>	<i>Reason for ODL according to Table 2</i>	<i>Relationship in FAHAM model in Figure 3</i>	<i>The needs in ODL</i>
I	None	A	- Learners need to fulfill basic needs for hunger, thirst, bodily comforts, and so on to continue the course.
II	<ul style="list-style-type: none"> <li>- Affordability</li> <li>- Convenience</li> <li>- Availability</li> <li>- Length of time for degree completion and</li> <li>- Flexible hours</li> </ul>	A	<ul style="list-style-type: none"> <li>- Learners need to pass the examination for grading purpose.</li> <li>- Learners need to have security of employment, security of revenues and resources in order to continue the course.</li> <li>- Learners need to have moral security from family to support them.</li> <li>- Learners need to have physiological security and security of health to overcome their anxieties in study.</li> </ul>
III	<ul style="list-style-type: none"> <li>- High level of interactivity between professors and students</li> </ul>	A	<ul style="list-style-type: none"> <li>- Learners need to have patience and persistence in interacting with the professors and peers.</li> </ul>
IV	<ul style="list-style-type: none"> <li>- Reputation of programme</li> <li>- Ability to work independently</li> </ul>	B	<ul style="list-style-type: none"> <li>- Learners need to have self-confidence and self-esteem.</li> </ul>
V	None	C, D	<ul style="list-style-type: none"> <li>Learners need to</li> <li>- be problem focused.</li> <li>- incorporate ongoing freshness of appreciation of the course.</li> <li>- concern about personal growth.</li> <li>- to know, to understand and explore.</li> <li>- find self-fulfillment and realize one's potential.</li> <li>- connect to something beyond the ego or to help others find self-fulfillment and realize their potential.</li> </ul>

Assessment issues can become a bigger concern for ODL learners. Adult learners typically experience more types of anxieties and frustrations. The frustrations may inhibit their educational opportunities (Hara and Kling, 1999). Research clearly shows that ODL learners need to be encouraged and it is also important to identify their needs (Faux, 2006). One of the most important factors that influence learners' approach and attitude to their learning is the assessment methods (Scouller 1995; Scouller and Prosser 1994). For example, a change in the method of assessment has been found to influence a change in medical students' study activities when they perceived the end-of-year multiple choice questions (MCQ) examination as more vital to their success than the ward-based clinical assessments (Newble and Jaeger 1983). There is a strong relationship between the method of assessment and learners' learning approaches (Scouller, 1996). Assessment methods may narrow or broaden the strategies and motives employed by students. Therefore, ODL course designers should regard assessment consideration as a vital decision.

Therefore, it is not surprising that the Australia flexible learning framework (2003) proposes that the research on the online assessment strategies should be modelled as closely as possible to real work situations, especially if people are employed. The outcomes should check that the learners' performance meets all the criteria and show that learners can solve real problems by applying what they have learned. Besides, it should also show that learners can think for themselves, find information and create their own solutions. Last but not least, it should be flexible to suit the content and the learners' purpose so that they are relevant to the learners.

## Four Aspects of Hybrid Assessment Model (FAHAM)

The paper proposes a progressive hybrid assessment model in ODL, namely FAHAM (Four Aspects of Hybrid Assessment Model) as shown in Figure 1. The model covers four aspects of assessment which emphasizes on (1) assessment for grading which determines the status of learning; (2) assessment for learning which serves to promote greater learning; (3) the learner's needs and (4) the learners' expectations. The two aspects of learners' needs and expectations are from the learner-centred perspectives and the other two aspects of assessment for learning and for grading are from the teacher-centred perspectives.

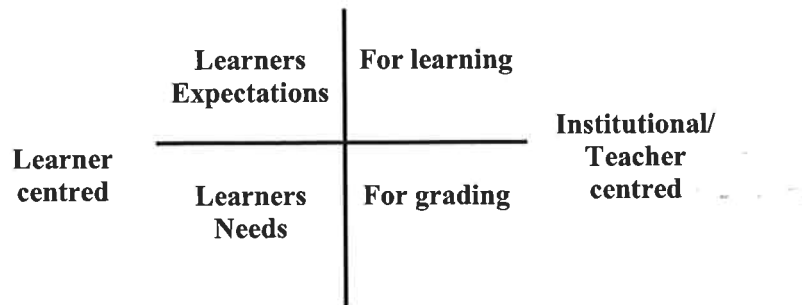


Figure 1. The FAHAM model

However, the relationships between the four aspects are not as clear-cut as visualized in Figure 1. There is commonality in between the four aspects. As illustrated in Figure 2, there are grey areas in between each of the adjacent pairs of the four elements because of common characteristics between them. For example, there is some overlap in between learners' expectations and needs. This implies that the learners' expectations, wants, and needs are different but some of them may actually refer to the same matter. In short, the four aspects are not totally different but there are grey areas between them.

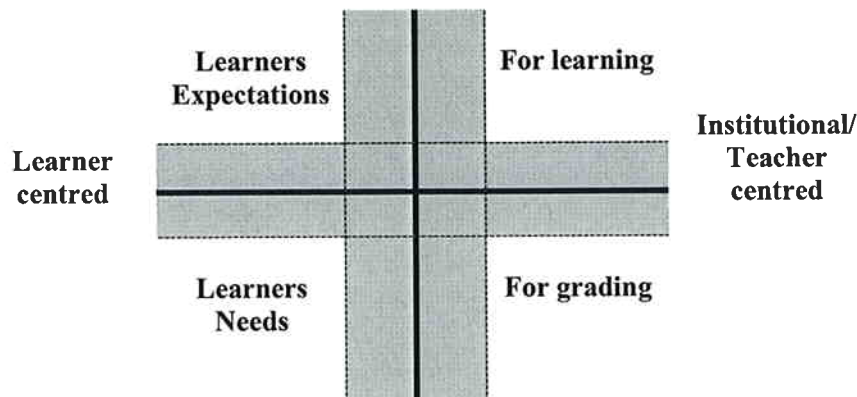


Figure 2. The grey area in the FAHAM model

Consequently, the FAHAM model is extended to Figure 3 mainly to allow ODL course planner or course designer to understand the learners' needs. Understanding or awareness of the learners' needs when planning the course plays an important role especially in the design of assessment procedures.

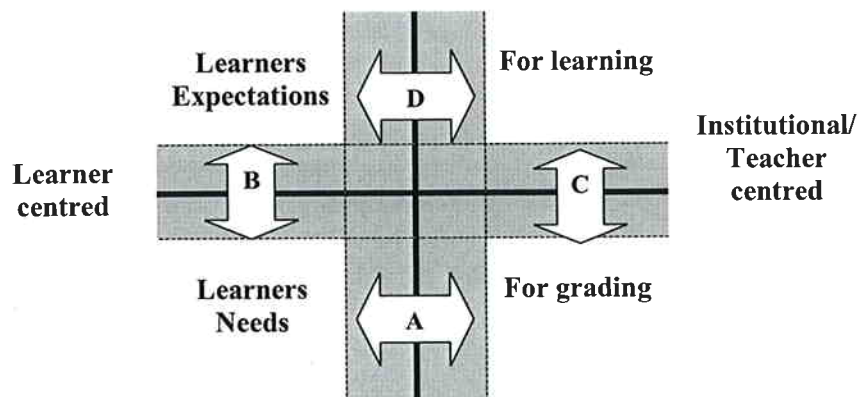


Figure 3. The relationship in the FAHAM model

The third and fourth columns in Table 4 illustrate the four relationships in Figure 3 with respect to the learners' reason for ODL and also their needs in ODL. In *Relationship A*, learners need to fulfill basic human needs for hunger, thirst, bodily comforts and so on in order to continue the course. Then, they need to pass the examination for grading purpose. They also need to interact with professors or peers for support. In *Relationship B*, because of self-esteem and self confidence, they choose the reputation of a programme to study and they trust their ability to work independently. Learners want to be respected at all times. In *Relationship C*, learners need to incorporate ongoing freshness of appreciation of the course; they are expected to be concerned about their personal growth and are required to know, to understand and explore the course. They have to find self-fulfillment and realize their own potential in the formal assessment. Lastly, in *Relationship D*, learners need to be problem focused, to achieve their full potential and to find the best way to learn according to their own preferred learning styles.

### Checklist of FAHAM

It is important to plan the assessment component from the beginning stage of the ODL teaching-learning chain starting from the course material development. During the course delivery process, progressive assessment and also the final assessment procedure based on the FAHAM could be useful. This section presents a sample checklist of FAHAM application when planning for an ODL assessment.

Assessment is a means of communication (Davis, 1993), thus as course designers, we normally have to consider the purpose of the assessment, what we assess, how we carry out the assessment and the appropriateness of our approach. Consequently, Table 5 demonstrates some of the proposed main tasks in the course design and delivery stages, following progressively the sub-tasks related to the four elements of FAHAM. For example, assessment procedure is used to measure the achievement of the learning objectives. Thus, the learning objectives should be planned during the course design stage taking into consideration the FAHAM model. Besides summative and formative assessment, the student's needs and expectations are incorporated in the checklist of the four elements in FAHAM.

**Table 5. A sample checklist of FAHAM**

Stages	Elements	Learners' Need	Learners' Wants	Summative	Formative
<b>Course Design</b>	<b>Tasks</b>				
	<b>Set learning objectives</b>	√	√	√	√
	→ Emphasize on mastery and learning rather than grades.				
	<b>Transform learners' expectation into assessment exercise</b>	√		√	√
	→ Design a scoring procedure to reflect learners' expectation.				
	→ Structure the course based on learners' strength and interests.				
	<b>Set realistic targets</b>		√	√	√
	→ Hold high but realistic expectations of learners.				
	→ Help learners to set achievable goals.				
	<b>Design tests that encourage learning based on what you want the learners to achieve.</b>			√	√
<b>Develop methods to observe learners' experience in understanding the fundamental principles of the subject matter</b>	√			√	
<b>Course Delivery</b>	<b>Analyze and group learners' profile</b>	√	√	√	√
	→ Capitalize on learners' existing needs.				
	<b>Identify and categorize learners' need and wants</b>	√	√		
	→ Identify and categorize the learning styles.				
	<b>Provide feedback to learners as quickly as possible</b>	√	√		√
	→ Be specific when giving negative feedback.				
	→ Avoid demeaning comments.				
	→ Avoid giving in to learners' pleas for "the answer" to formative assessment problem.				
	<b>Build learners' confidence</b>	√	√		√
	→ Inform learners what they need to do to succeed in the course.				
	→ Avoid using grades as threats.				
	→ Motivate learners to learn on their own and retain knowledge.				
	→ Encourage learners to understand the learning objectives.				
	<b>Communicate with learners</b>	√			√
	→ Motivate learners by responding to their work.				
	→ De-emphasize grades.				
	→ Allow learners to have a say in choosing what to study, whenever possible.				
	<b>Engage in self-assessment</b>	√		√	√
→ Increase the difficulty of the course materials as the semester progresses.					
→ Vary the teaching/delivery methods.					

## Conclusion

Individual learners may be different in their respective needs and expectations in various aspects of assessment. However, a framework of the basic coverage of needs should be in place to gain more understanding of learners in order to lead to a more satisfactory learning outcome. The coming decade will provide unlimited opportunities for developing new and improved methods for delivering curriculum content. The growing needs for continuing education programmes from the industrial/professional sectors, the ever-increasing pressure on academic to perform research and publish, and the growing cost of delivering quality education are some of the key factors that will drive educational institutions to seek more effective and efficient methods of delivery.

Therefore, this paper presented a conceptual model of a progressive hybrid-assessment model in open distance learning, called FAHAM (Four Aspects of Hybrid Assessment Model). The model integrates four assessment perspectives namely formative and summative assessment together with learners' needs and expectations. The model has been presented not only in view of conventional assessment methodology in formative and summative assessment, but also the learners' needs and expectations according to Maslow hierarchy of needs. After the analysis, the FAHAM model has been presented followed by a proposed checklist of FAHAM. The checklist will definitely help in planning an effective assessment strategy in open distance learning.

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