

A Motivation-Metacognition Model for ‘At Risk’ Adult Distance Learners

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ABSTRACT

The quest of this paper is to discuss the means to support and guide ‘at risk’ learners to work towards better academic performance, and to enable them to graduate from the university with a degree. Our focus concerns the ‘at risk’ learners at one learning centre of Open University Malaysia (OUM). The literature review identifies various risk factors among adult learners. Recognizing this, the authors seek to describe effective solutions for minimizing risks among ‘at risk’ learners. In view of this, a self-directed learning mode is proposed as an effective means to engage adult learners. Motivation and meta-cognition are two main components of this self-directed learning mode. This conceptual paper proposes the translation of motivation and meta-cognition into strategies. As a guide to encourage self-directed learning mode a sequence of measures for academic counsellors is hereby proposed. By engaging with ‘at risk’ learners and guiding them to become self-directed learners, we hope to improve their academic performances.

Keywords: Self-directed learning mode, Motivation, Meta-cognition and Adult distance learners.

INTRODUCTION

The Centre of Student Affairs at Open University Malaysia (OUM) has taken the initiative to provide academic counselling to ‘at risk’ learners who are not performing well in their studies. These learners are those who have CGPA less than 2.00 in an undergraduate degree programme. Initially a number of activities involving academic counselling were initiated to reach out to ‘at risk’ learners. Additionally a survey was done to find critical factors responsible for poor academic performance. It was found that ‘At risk’ learners indicate the following factors as root causes for poor academic performance:

- Poor time management
- Inadequate learning skills
- Lack of focus on their studies

- Weak foundation in the subject matter, especially in mathematics and science.
- Lack of English language proficiency

The survey also indicated that few 'at-risk' learners were absent during tutorials. However, most were found to be passive in tutorial classes as well as in the online forum.

The focus of the paper is 'at risk' learners in the Shah Alam, Section U1 OUM learning centre. They are about 80 'at risk' learners who are all working adults undertaking the Bachelor of Education in Science and Engineering fields. All of them are provided with educational loans by their employer, the Teacher Education Section of Ministry of Education, Malaysia.

The quest of this paper is to discuss the means to support and guide 'at risk' learners to work towards better academic performance, and to enable them to graduate from the university with a degree.

LITERATURE REVIEW

Research indicates that most adult learners are attracted to distance learning programme because they receive total support from their employers, employees receive pay increases and promotions, and the majority of the employers support the immediate transfer of learning from the classroom to the workplace (O' Lawrence, 2007).

Apart from this, adults have a self concept characterized by independence. They are self-directed and they are generally capable and willing to be self directed in their learning (Moore, 1986). Self directed learning as defined by Knowles (1975) is represented by many elements, including: learners initiate learning, determine needs, set goals for learning, select strategies and evaluate learning outcomes.

The psychological definition of adult education, by Boyd is to approach subject matters on their own, without having a teacher or a lecturer guiding them. Theoretically the adult knows his own standards and expectations. He no longer needs to be told, nor does he require the approval and reward from person in authority (Boyd, 1966). Moore (1986) further classifies adult learners in distance education into three categories, as follows:

- The first adult learner category refers to self-directed learners who have decided that the teaching programme of their institution meet their learning goals.
- The second adult learner category refers to self-directed learners who are motivated by a

need for a degree which can only be obtained by following the teaching programme offered by the institution.

- The third adult learner category refers to learners who are not considered as self-directed learners. They have neither a learning programme, nor a need for certification but use the educational institution to satisfy emotional need for dependence.

It follows that not all adult learners are self-directed. Cross (1981) estimated that 70 percent of adult learning is self-directed. A general consensus in the literature on at least two common characteristics that have an impact on learning efficacy and the overall classroom experience for mature group of learners or adult learners are lifetime experiences and the self-directedness of the learner (Cook, 1993). Both the inability to incorporate their lifetime experience to their learning and the inability to implement self-directed learning can be considered as 'risk' factors.

Adult learners who identify and decide that the teaching programme meets their learning goal can only do so if they can incorporate their lifetime experiences into. Such learners together with self-directed characteristics would then have higher chances of performing well in their academic pursuits.

Experience suggests that learners may be engaged in courses which are not related to their work. Such learners would probably not be able to relate their learning goals to their experience. Nevertheless, if their learning mode contains elements of self-directed learning they could excel in their academic performance. In such cases, the inability to become a self-directed learner would pose a risk in achieving good academic performance.

Learners who fail to incorporate their lifetime experience to their learning and to implement self-directed learning would face a great deal of difficulty in achieving good academic performance.

Table 1 shows three categories of adult learners. Self-directed learners who are able to relate their lifetime experiences in their learning process fall in the first category. They have high chance to perform well in their studies, thus also known as the low risk group. Self-directed learners are not able to relate their lifetime experience in their learning process, face medium risk factor in achieving good academic performance. These learners belong to the second category. Learners who fall in the third category are learners who are not self-directed and unable to relate their lifetime experiences in their learning process. These learners face high risk in achieving excellent academic performance.

The above discussion concerning risk among adult learners is summarized in Table 1.

Category	Lifetime Experience	Self-directed Learning	Risk
1	√	√	Low
2	X	√	Medium
3	X	X	High

Adult learners prefer distance learning as it allows them to balance work and family demands (O'Lawrence, 2007). This suggests that adult distance learners have additional risk factors. Issues at work and/or home can induce stress and an inability to focus on their studies. In terms of these risk factors, Cross (1981) identified three major barriers to learning. These are:

- Situational barriers, involving common factors of life circumstances with the most common of these being time, home, or job responsibilities.
- Institutional barriers, or institutional practices, procedures and policies that place a burden on the learner.
- Dispositional barrier, or the personal attitudes and perception of oneself as a learner.

The above, albeit brief, review of literature suggests that a number of issues and barriers should be resolved in order for a learner to achieve better academic performance in a distance learning institution.

THE DISTANCE LEARNING EXPERIENCE AT OUM

All adult distance learners in OUM are provided with a print module for each course. Modules contain a course guide which introduces the course and a recommended study guide. For a three-credit course a total of 100 hours must be spent by a learner to read, understand and work on the examples and exercises given. Learners are also given an option to attend a total of 10 hours of face-to-face tutorials. In addition, the asynchronous online forum among a tutor and a group of learners is available.

As a point of reference, face-to-face tutoring comprises 8.33% of total actual learning hours per course. The tutorial session is provided to the adult distance learners in OUM as a mean to allow the learners to adapt to distance learning environment (which is new to most). This is to provide additional guidance to those who are still dependent as a learner.

It is posited that self-managed learning weighs 50% of the total learning hours. This excludes

online interaction and work done for an assignment, which indirectly forms part of self-managed learning. This clearly shows that distance education emphasizes self-managed learning provided through the Online Learning Management System (myLMS), which is an e-learning platform developed by OUM. It supports and enhances online learning at OUM. It enables tutors and learners to bring the face-to-face classroom into virtual environment. Through myLMS, tutors and learners can access course materials and references, communication tools and collaborative tools such as the online discussion forum for the purpose of teaching and learning.

Apart from the face-to-face tutorial support, the learners are also provided with academic counselling sessions. Personal counselling sessions are also provided by the OUM Counselling Unit. In addition, the learners can also seek assistance from Learner Service Centre, administration office at all learning centres, faculties and Centre for Student Affairs.

‘AT RISK’ LEARNERS

All learners in the Shah Alam, Section U1 OUM learning centre fall under the adult distance learner in the second category as defined by Moore (1986). These learners are primary or secondary teachers enrolled in the education degree programme majoring in science, mathematics and engineering as offered by the Teacher Education Section from Ministry of Education, Malaysia. As the teaching programme is predetermined, learners are subjected to some risk in achieving good academic performance. There are about 80 ‘at risk’ learners at this centre, which is about 9% of the total population. Although this appears to be small fraction it is nevertheless important to assist these learners in improving their academic performance. Based on the literature review a survey, the critical risk factors among these learners are identified as:

- situational barrier, which covers external problems (related to work, home or others), and
- dispositional barrier, which is related to the inability of a learner to become a self-directed learner.

However academic counselling sessions and all other OUM efforts to address ‘at risk’ learners have often drawn a poor response from these learners with a 20% attendance at each session. Thus addressing, dispositional barriers to learning among ‘at risk’ learners appear to be paramount in bringing about improved performance.

In lieu of this, an academic workshop involving 17 ‘at risk’ learners from the Shah Alam OUM was conducted to review the situational barriers highlighted in the previous survey. In relation to this a booklet on issues such as goal setting, time management, stress and learning skills was first

distributed. The workshop also allowed these learners to discuss and share their own situational barriers. As an outcome of this workshop, a lack of motivation was identified as the most critical factor that relates to their poor time management and hence poor academic performance. It was also ascertained that motivation also played an important role in overcoming all other situational and dispositional barriers.

Keintz (2004) stated that although a lack of time and money is often cited as a reason for not continuing their education; this reason is also socially acceptable. He also stated that an adult, lacking the motivation for less socially accepted reasons, would cite time and money as a rationale for not participating when in reality, the reason may be simple lack of desire or motivation.

The question is how can we motivate and guide 'at risk' learners to work towards better academic performance, and to enable them to graduate from the university with a degree.

Strategies to Guide 'At Risk' Learners to Become Self-directed Learners

Motivation is a concept that helps explain why people think and behaves as they do. One of the most commonly measured indicators of motivation is persistence, and when this exists, people work longer and with more intensity. Motivation is an internal state or condition that serves to activate or energize behaviour and give it direction (Kleinginna and Kleinginna, 1981a). Motivation is important for education. A motivated learner will surpass an unmotivated learner in performance and outcomes. When there is no motivation to learn, there is no learning. Learners who leave the educational environment feeling motivated are more likely to have a future interest in what they have learned and likely to use what they have learned (<http://www.umsl.edu>).

A study by Hubbard (1994) also suggests that learner who exhibits more self-directed learning behaviour perform better than students who do not. As mentioned earlier according to Knowles, a self-directed learner initiate learning, determine needs, set goals for learning, select strategies and evaluate learning outcomes. In the December 2004 Topical Summary published by the Northwest Regional Educational Laboratory highlights the importance of motivation among other traits of self-directed learners. Another equally important trait of a self-directed learner as indicated in the report is metacognition.

Metacognition is an important cognitive theory and plays a critical role in successful learning. According to Flavell (1979, 1987), metacognition consists of both metacognitive knowledge and

metacognitive experiences or regulation. Metacognitive knowledge refers to general knowledge on how human beings learn and process information whereas metacognitive experiences stated by Brown (1987) are sequential processes that one uses to control cognitive activities and to ensure cognitive goal has been met.

Other self-directed learner traits over which a learner can have control are: amount of effort, note taking, perseverance, locus of control, self-efficacy and self-regulations (NR Educational Laboratory, Dec 2004).

The most important task is on the translation of the self-directed learning concept into a practice for at risk learner. This requires a paradigm shift in terms of the belief and behaviour of a learner. The flowchart in Figure 1 depicts a step-by-step guideline for 'at-risk' learners on becoming a self-directed learner. The first step would be to create awareness among the 'at-risk' learners on the critical level of their academic performance. Upon acknowledging the problem, learners should also be convinced that they play a very importance role in their own education, and thus hold a big responsibility. Next, learners should be motivated through effective goal setting to enable them to carry-out their action plan as suggested in the final step. Learners who are able to improve their academic performance by using metacognitive strategies would become more confident and become more independent as a learner.

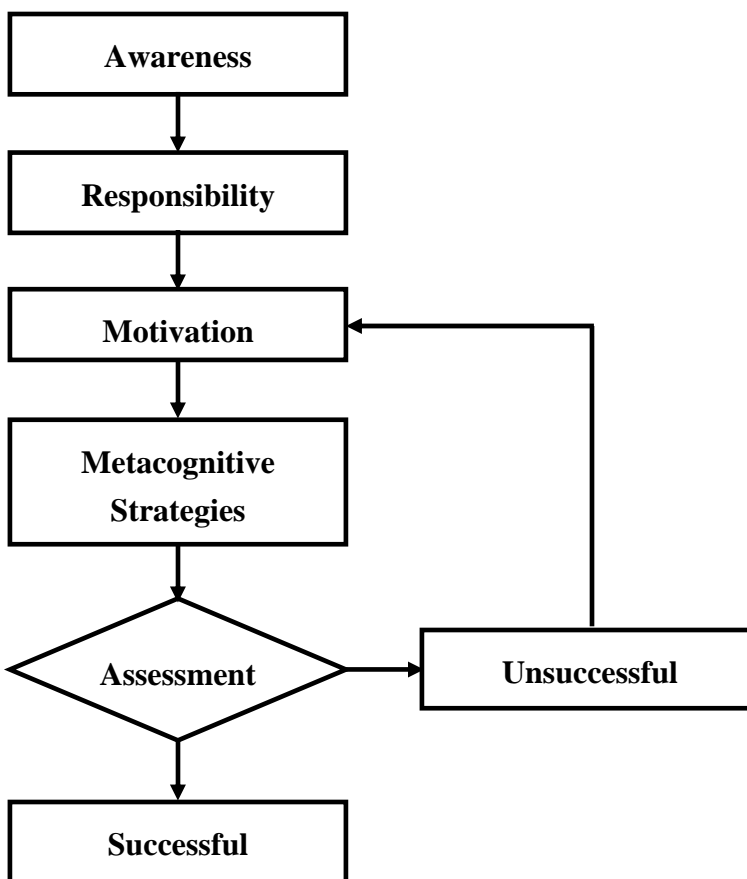


Figure 1: Motivation-Metacognition Model for At-Risk Adult Distance Learners

Step 1: Create an **awareness** in ‘at risk’ learners about the status of their academic performance and its impact to their education and career development. A learner whose CGPA dropped to below 2.00 must be approached to explain the implications of having a CGPA less than 2.00. Often ‘at risk’ learner take this issue for granted and leaves it for last minute actions or resolutions.

Step 2: Create a sense of **responsibility** to improve their own academic performance. This step is very important as learners who do not have such sense of responsibility tend to shift the blame on external factors alone. The danger in doing so is that these learners would then refuse to take any action to address their academic issues. However, this is not an easy task. An academic counsellor can perhaps use the following brief guidelines.

- An academic counsellor dealing with this matter should at first listen to what the learners have to say.
- The academic counsellor should be able to analyze and classify the stated comments into external and internal causes. External causes are causes that

require action from external parties other than the learner, while internal factors refer to actions by the learner. This has to be done discreetly. The academic counsellor should not make any suggestions, but merely post questions and provide guidance for the learner to find solutions to internal causes.

Step 3: Help learners to instil **motivation** through effective goal setting. Goals must be translated to specific objectives that are measurable, challenging, realistic and time-bounded. However, one has to be careful to differentiate between learning goals and performance goals. Successful learners focus on learning goals and translate it to performance goals. Guide ‘at risk’ learners to set their educational goals (refer to Appendix A). However, implementation of goals requires change in one’s behaviour. Learners should:

- maintain self-efficacy beliefs;
- foster beliefs that competency can be improved;
- realise that level of motivation should not be dependent on subject matter;
- be provided with constructive feed backs, which improve their independent learning process as well as their confidence.

Step 4: Guide the learners to use **metacognitive** learning strategies, which involves taking conscious control of learning, planning and selecting strategies, monitoring the progress of learning, correcting errors, analysing the effectiveness of learning strategies and changing learning behaviour and strategies when necessary (Ridley et. al., 1992). Refer to Appendix B.

If the self-regulation attempt provides a positive outcome, it can reinforce their intrinsic motivation. Unfortunately, the outcome can be detrimental if it is negative. In order to avoid such outcome to become a stress and reduce learner’s motivation level, an intervention from a tutor or an academic counsellor is necessary.

Nonetheless, it is important to provide continual and various point of support to ‘at risk’ learners throughout their education programme. These learners may find some of their attempts to improve their studies fail and unsuccessful resolution of their academic performance may result in emotional distress or burnout that will cause them to fail to come forward for academic counselling or even peer-support (Gary et. al., 2004).

SUMMARY AND FUTURE WORK

Previous work on adult learners suggest self-directed learning mode as an effective mean to engage adult learners. Motivation and meta-cognition are identified as two main components of self-directed learning mode. A practical model, which translate motivational and metacognition strategies is structured to guide 'at risk' learners to become self-directed learners. This model would be used by academic counsellors to guide 'at risk' learners whose CGPA is less than 2.00 at the Shah Alam, Section U1 learning centre of Open University Malaysia (OUM) to achieve better academic performance.

The following are three suggested areas of research which would be useful.

1. Research work can be focused in answering critical questions posed by Fisher (1995). One could attempt to compare the importance of self-directed learning theory and the critics claim that instructors adopt self-directed learning mode in order to be less accountable.
2. There is a large number of 'at risk' learners who are not willing to address their academic problems. A study could be conducted on finding reasons behind this passiveness.
3. The above framework to guide 'at risk' learners is suggested in dealing with a manageable pool of learners. Most distance education institutions have extremely large number of learners. An institutional research can be designed to focus on the practical means in dealing with large populations of 'at risk' learners.

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Appendix A

Effective Goal Setting

First, write down your dream, which is a vision of the future, of how you see yourself in the future.

Second, write down your goals. Goals are "wants" that are more specific. Look back at your dreams. Start a list of specific things you want. Be really clear what you mean. If you want to be rich, tell how much money you need to be rich. If you want good grades, tell what you mean by "good" grades.

Third, write down your objectives. Objectives are the things we do to get what we want. Use the following rules to set your objectives:

- Be very specific; what you will do and when you will do it.
- Make a commitment to it and write down your objectives.
- Use positive terms: I WILL ... Don't use words like "try or maybe".
- Be sure your objectives can be measured. Every day or every week I can say, "Did you do this?" and you answer with either a yes or a no.
- Objectives must be challenging, but realistic. Otherwise it will give you the pleasure of putting in extra efforts to achieve them. You must analyse your personal strength and the possibilities of achieving the goals.
- Your objectives must be time-bounded. Timeless objectives may not materialise as there is always another time to achieve them. You need to set deadlines of your progress to ensure that you will meet the target time.

Resources:

1. Harvinder K, (2006). Study Guide for Open Entry Learners. Open University Malaysia.
2. <http://www.d.umn.edu/kmc/student/loon/acad/strat/motivate.html>.

Appendix B
Metacognitive Strategies for Successful Learning

<p>Step 1: Taking conscious control</p> <ul style="list-style-type: none"> • Consider your motivation level • Consciously identify what you already know • Consider your personal resources • Consider the task requirements • Determine how your performance will be evaluated • Estimate the time required to complete the task 	<p>Step 2: Planning and selecting strategies</p> <ul style="list-style-type: none"> • Plan study time into your schedule and set priorities • Make a checklist • Take the necessary steps to learn by using strategies like outlining, mnemonics, diagramming, etc.
<p>Step 3: Work according to your plan</p>	<p>Step 4: Monitoring</p> <ul style="list-style-type: none"> • Monitor your own learning by questioning and self-testing • Correct errors and provide your own feedback
<p>Step 5: Reflection</p> <ul style="list-style-type: none"> • Reflect on the learning process, keeping track of what works and what does not work for you 	<p>Step 6: Keep motivation high</p>

Adapted from: An article by Halter, J. <http://coe.sdsu.edu/eet/Articles/metacognition/start.htm>.