

A Research on Learner Retention and Learning Support

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Abstract: Why do some of adult learners successfully accomplish their learning while the others drop out? This has been an important question in the field of adult learning. For a long time researchers has been exploring this subject around learning barriers as well as motivations. Not until lately did some of adult and distance scholars start to pay attention to the question of why some of the adult students could successfully push through their learning process even if they are in a disadvantaged situation. Thus, Learner Retention has become one of the important themes to discuss in order to understand more about how to assist learners to persist through their learning.

The main purpose of this paper is to explore how adult learners persist through their learning and factors that might have influences on them. Adult teachers and NOU students (including those who already graduated and those who dropped out) were interviewed and surveyed. Concluding from those data and content of interviews, this paper set a model that describes how adult learner retain through their learning process and some suggestions are made for better student learning support policies.

Key words: distance education learning retention learning process adult learning support

Introduction

Adult learning is basically a psychological process under the influence of personal factors and learning environment. Many adults joint learning with clear goal and aspiration but end up with dropping out. Many of us would ask the question: why couldn't these learners persist and sustain their original aspiration? What would be the cause of the attrition? But when we take this question from another angle, we might want to ask how adult learners persist through their learning and what would be needed to help them to be successful? How does learner interact with learning environment and how does learner go through a psychological mechanism that would make the learning experience a success? These are the main interest and questions to be answered in this paper.

The main purpose of this paper is to discuss learner retention and the influential factors through a close inspection on learning process by surveying and interviewing adult students graduated and dropped out from the National Open University (Taiwan) . Four adult teachers were also interviewed to collect their perspectives on learner retention. This paper concludes with model that illustrates how adult learner persists through learning lifecycle and its influential factors.

1. A Review on Researches of Adult Learning Process

Before continuing the discussion of adult learning retention, we need to do a short review on literature of adult learning process, which is important to the understanding of adult learning. Many researchers have been studying the barriers to adult learning, and trying to find a way to remove those barriers. They ask the questions, such as Who would possibly dropout from learning? What characteristics of a learner would be the predictors? Or questions such as what

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would be the barriers to learning? How do we remove those barriers from learners? Researchers concentrated on analyzing individual, institutional, as well as social factors of learners in order to discriminate disadvantaged learners from the others. Researchers such as Cope & Hannah, Pantages & Creedon, Pascarella, Bean researched and discussed the demographic background and personal characteristics of learners that could provide information about who might possibly drop out (Kember, 1995, p 32). Later researches also made discussion on learners' individual characteristics (such as personalities, learning styles, family background, job situation, life pressure, etc.) and institutional conditions (such as administrative context, instructions, learning materials, and tutors, etc.), Researchers tried to identify and to reduce the influence of those factors that might hinder learners persistent to learn, for example, researches done by Panos & Astin (1968) Rootman(1972), Thompson(1984), Chen & Chen (1988), Chen (1995), Liou (1995) did offer a solid basis for us to understand learning barriers or influential factors related to learner dropout. However, we could only passively discriminate those learners from the others based on those characteristics concluded from these researches, but we could do so little to effectively keep them away from failure. That is why we were trying to solve the problem from the angle of "barrier".

While reflecting on the "barrier angle" of looking at the drop-out problem, it might come to us that why don't we turn around and look at the problem in a more positive way or from both sides? Woodley and Parlett broke away from the traditional "barrier angle" and went with a broader point of view and offered a theory of "pull" and "push". They described that adult learners would face two kinds of power that strongly influences their learning. The power of "pull" would have negative magnitude that might pull learner away from learning, such as difficulties in study, high tuition fee, unsatisfaction toward teachers, family burden, etc. These are so-called barriers to learners. The other power exists is the power of "push" that provides learners motivations to learn, such as a job promotion, a future of obtaining degree, a sense of growth, and family support. When the magnitude of "push" is greater than "pull", learner would be more likely to continue to learn. But when the magnitude of "push" is smaller than "pull", learner might experience a negative process that would possibly pull individual away from learning (Chen & Chen, 1988).

The theory raised by Woodley and Parlett offered a new perspective to adult learning and bring in a primitive concept of learning process which allowed us to view learner drop-out from a multi-angles. Yet, their perspectives did not provide enough bases for an in-depth analysis on the psychological mechanism of learning process. Responding to the need of looking at adult learning from the "process" perspective, David Kember presented the "Student Progress Model" to explain how adult learners go through different paths during their process of learning. Kember proclaimed that studies concentrated on learning barrier could not provide solutions to drop-out problem; we should brake away from exploring the causes of drop-out and try to understand how learners learn successfully and how they overcome barriers.

Kember explained that learners would undergo two different types of learning path. One is from social integration to academic integration; another is from external attribution to academic incompatibility. Adult learners interact with learning environment would undergo one of the learning path and finally come to face the result of learning (GPA). After weighting between the cost of continuing to learn and GPA, individual learner would make their own decision, to dropout or to retain.

Kember initiated a good orientation for researchers who are interested in adult learning. Not only did Kember bring us out of traditional perspective, but also refresh us with his "Student Progress Model" which introduced a concept of process in a more dynamic way. This new concept also taught us to think more about "successful learning" rather than concentrating on learning barriers. And this is one of the major concerns of this paper.

2. A Discussion on Adult Learning Retention and the Influential Factors

There is a strong reason to concern about how adult learners retain through out their learning process. Adult educators would often perceive that some of those adult learners facing many learning barriers would persist even with greater failure in learning. But some other adult learners would easily give up even though barriers could be overcome with only a little extra effort. Questions come to researchers that why learners facing similar learning difficulties would make different decision? Or more specifically, why some barriers would cripple one learner while holding up the other? To answer these questions, we really need to inspect carefully the psychological mechanism of learning process.

Why it is important to know about learning retention? And what is essential for pertaining learning retention? And how does adult learner persist throughout their learning? These are the questions this paper is trying to answer. According to Woodley and Pallet's hypothesis, adult learners would experience two opposite power -- "push" and "pull" during their process. Learning difficulties and environmental barriers are the constituent of the power of "pull" which will carry learners away from learning. Social support and academic achievement are the constituent of the power of "push" which would increase the possibility for learners to retain in learning. Therefore, it is reasonable to hypothesize that the arithmetic sum of the positive and negative power would be the final balance for learners to make decision with. If the final balance is positive, the learners are more likely to retain, if the final balance is negative, the learners are more likely to drop out. The bigger the volume of the balance, the greater magnitude or pressure the learners would experience, no matter the balance is positive or negative.

The following would be an analysis on how adult retain through their learning process based on data collected from questionnaires and in-depth interview with NOU learners and adult teachers.

3. "Successful Learning Process" – Perspectives from Adult Teachers

Considering the teaching experiences and the understanding of learners, adult teachers would provide useful insight on adult learning, the author went into in-depth interviews with four prestigious adult teachers on their perspectives of learning retention and the influential factors. These four prestigious teachers were specialized in theory and practice of distance education, adult teaching and educational training. On reviewing the content of interviews, the author came into conclusions stated as follow.

3.1 "Sense of Progress" Is the Elementary Factor for Successful Learning

According to these adult teachers, there has to be some experience of "sense of progress" to conduct successful learning. Adult learners start their learning journey with strong motivation and have to maintain it throughout their learning, and the maintenance of learning motivation is the key point to a successful learning. How adult hold up their learning motivation is what we need to pay attention to. One of the adult teachers proclaimed that it is insufficient for the understanding of adult learning merely with attention to participation motivation, motivations to persist in learning is more important because, according to the adult teacher, "Persistent and determination play much important roles in learning than a heart that initiate participation". That is to say, persistent is the basis for continuity.

How does adult learner pertain learning persistent? Adult teachers expressed that learning is a series of challenges. Facing these challenges, no matter harsh or mild, learner has to obtain "a sense of progress" in order to override other sense of inability caused by barriers or learning difficulties. And the magnitude of "sense of progress" is very important to the volume and quality of persistent. The above stated perspective shows some similarity with Woodley and Parlett's theory that the summative magnitude of "push" has to be greater than "pull"

to keep the learners in learning. Moreover, the emphasis on the “sense of progress” stresses on the importance of interior satisfaction and reward that is essential to the enhancement of self-efficacy. And this self-efficacy is significant for learning retention.

3.2 Two Keys to Successful Learning – Academic Achievement and Sense of Progress

According to adult teachers, magnitude of the “sense of progress” is not the only influential factors to learning retention; the result of learning is also the source to continuity. Adult teachers indicated that besides the sense of progress that would bring in satisfaction and happiness of learning, there exists an important element, which is the academic result of learning (test score). If the test score is satisfactory to the learner, learner would have more courage to continue, or else, learner might be discouraged. However, what is the satisfactory score for learners? Is the sense of satisfactory influenced by personal perception? The answer is positive.

According to one of the adult teachers, learners who take degree obtaining as the main learning goal would put more emphasis on GPA, and the acceptable GPA for individual would be different from those who take learning as self-fulfillment. On the other hand, learners who take obtaining useful knowledge as their main learning goal would not be satisfied only with high GPA because learning itself is more important than grades. No matter GPA or sense of progress, satisfaction on both would be the key to successful learning. This is similar to Kember’s “Student progress model”, Kember explained that learners would undergo two different types of learning path. One is from social integration to academic integration; another is from external attribution to academic incompatibility. Adult learners who undergo either one of the learning paths would finally come to face the result of learning (GPA). After weighting among the cost of continuing to learn and the result of learning, individual learner would make their own decision, to dropout or to retain. Adult teachers in this research emphasized their perspectives that learners would certainly face challenges of meeting the need of both academic achievement and interior satisfaction. And these two conditions would be weighted between personal value, learning goal and future cost under the influence of individual’s perception. And the personal conclusion would result accordingly into a decision - to continue or to dropout. The difference between the model of Kember and the adult teachers lies in the expression of path, yet both provide an insight to how learners make their decisions.

3.3 A Positive Transaction Would Reinforce Individual’S Retention

According to interviews with adult teachers, a common perspective could be easily found among those interviewees; that is, the positive transaction of learners could be a strong power of enhancement to learning retention. Whichever learning goal a learner possess, as long as he could experience a positive transaction heading toward the goal, the motivation to continue to learn would be positively reinforced. Indeed, “a positive transaction” raised here is similar to “the sense of progress” stated above, yet this “positive transaction” leads to a broader point of view. Basically, “the sense of progress” indicates more of a interior satisfaction and happiness from learning, and the “positive transaction” emphasizes on the acquisition of change toward a better stage of life such as getting closer to degree obtaining or feel more capable at work. Whenever a learner feels more capable and self-efficacy, it would be certainly a strong encouragement to him, and this encouragement would be a powerful reinforcement on learning retention.

George Demetrio (2001) carried out a long-term follow-up with three adult learners and took down a diary about their psychological learning process. George Demetrio’s findings provided a strong evidence of Dewey’s concept of growth, which helps us to gain an insight on how students progress from desired ends to their

actual attainment. George Demetrio expressed that learning goal (degree or knowledge) is not absolutely related to personal growth, and the psychological process and awakening is the essential element for individual to change. Thus, we may clearly understand, from George Demetrio’s analysis on those three adult learners, that learning to change as well as obtaining positive change, no matter facing any difficulties and barriers, learning would be a successful process, and this would be a powerful engine to push one through toward the “ends-in-view”.

3.4 External Support Is Effective to Learning Retention

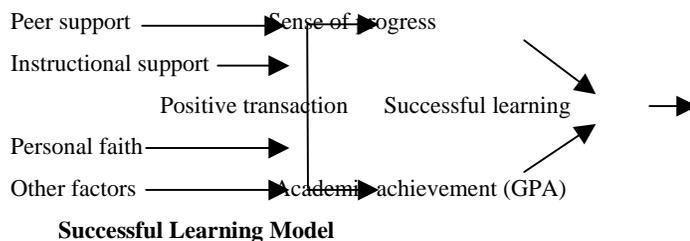
Adult teachers considered that the main power to maintain learning is derived from the faith of learner no matter the learning goal is set at obtaining degree or self-fulfillment. To adult teachers, the faith is the most important of all. Yet, external conditions are also important to learners such as supportive peers and families and good learning environment. One of the adult teachers emphasized that teachers are one of the key factors that impacts deeply on learner, especially in a traditional face-to-face learning situation. Teachers have to build up a peak learning experience that is influential to learners. In other words, teachers themselves are somewhat like powerful engines that would bring-in experiences that sparkle learners for more learning. However in distance learning environment, as expressed by this particular adult teacher interviewee, the lack of teacher-student contact would diminish the effect of individual teacher’s attraction, learners are on their own, learning materials become the main source for learning. Could learning material take the place of teacher successfully? It is another question to be answered.

Adult teachers in this paper emphasized that peer support is one of the important factors that would affect the learners. Peers working together as a learning group would provide each other a sense of belongings and acceptance, which is an essential to human needs advocated by Maslow. Based on this concern, the distance and on-line learning courses should be designed with more interactions, human-materials or some synthetic response in order to hopefully enhance learning effect. Yet the need for human contact, interaction and learning support is inerasable and irreplaceable, no matter how we try to build the learning environment with a self-contained feed-back system in distance and on-line course, we could not get away with the need of human contact from learners. Human contact and interaction from peers and teachers are still essential for a good learning experience.

Beside the above mentioned external supports for learning, adult teachers also counted in the families support and encouragement as two elements for learners to keep on learning.

3.5 Successful Learning – A Model Concluded from Adult Teacher Interviewees’ Point of View

Based on the above perspectives concluded from the adult teachers’ interview, the author tried to build a successful learning model to depict how learners undergo the learning process to a successful result.



4. Adult Learning Experience and Learning Persistent – A Comparison between NOU Graduates and Dropout

In order to understand the learning retention of adult learners and its influential factors, the author conducted a survey and interviews on NOU graduates and dropout. The questionnaires were carried out on two groups of NOU learners, one group is 600 NOU learners who have already obtained their degrees, the another group is 800 dropout learners who stopped their NOU course for at least two to four semesters. The authors choose these two groups of learners as the sample based on their sharp contrast in learning experience, which might provide strong evidence for comparison. The following discussion is presented on the basis of the survey and interviews.

4.1 Is the Type of Learning Goal Influential?

Archer & Schevak indicated that the relationship between the type of learning goal and learning achievement is one of the emphases in recent research on learning motivation. They considered that learners with “performance goal” incline to conduct surface learning. They like to choose easy learning task to accomplish and take grades as important result of learning. Learners with “mastery goal” incline to conduct deep learning and do not choose learning task according to the level of difficulty but their interest. Their learning is less influenced by their grades.

In comparing the learning goal and the level of regard to grades between NOU graduates and dropout, the author found that there was no significant difference (based chi-square test) between these two groups of learners when asked about their original learning goal. “Degree obtaining” gained highest score for both groups of learners while “self-growth” as the second highest. This result has brought us a question: “Is the type of learning goal really not influential to learning result?” When the author did a comparison on the level of regards to grades between these two groups of learners, another result floated up. These two groups of learners were significantly different from each other on this item. Dropout group gained a much higher score than the graduate group when asked about their concern on pass/fail. This statistical result may not allow the author to conclude the relationship between successful learning and the lower level concern of grades. The reason is that there exists a suspicion that successful learners would change their original perception toward grades after they had obtained their learning goal. NOU graduates are in a more advantaged standing point than NOU dropout; therefore a straight comparison between these two groups would become a case of over-inferential. However, it is reasonable for the author to raise another question. Although there exists no significant difference between NOU graduates and dropout in their original learning goal, there might be significant changes during the learning process between these two groups of learners. Would these changes significant for learning retention?

4.2 Would It Be A Positive Power to Learning Retention When Learning Becomes An Internalized Reward to Learners?

Huang (2000) raised a hypothesis that learners would experience an important change of learning goal during their learning process. If learning could become an internalized reward, learners would more likely to be persistent in their learning. That is to say, regardless of learner’s original learning goal, if this change happens, learner would become a deep learner who takes mastery learning as their primary goal, they would experience more happiness and sense of achievement that are essential to a successful learning.

In comparing NOU graduates and drop-out on “The changes of learning goal during learning process”, the author found that 56.6% of NOU graduates expressed that there were some changes while only 34.1% of NOU drop-out expressed changes of learning goal. A Chi-Square test was conducted between these

two groups and a significant difference of percentages was found. The author also found that 76.1% of NOU graduates changed from practical oriented goal toward more inner-oriented ones while only 51% of the dropout group did the same. The above stated statistics provide supportive evidence that a transformation toward internalized reward of learning is influential to learning retention.

4.3 Does Teaching-Learning Context Have Significant Effect on Learning Retention?

Independency is often stressed in distance education. Most learners would probably have difficulty in adapting to distance learning environment. Less interaction and support are the mostly reported problems from learners. Educational psychologists have been paying attention to the influences of environmental factors to learning motivations (Archer & Schevak 1998). They conclude that methods and strategies used in teaching would have profound influences on learning motivation. To what extent would teaching-learning context impact learning? Would the characteristics of learners interact with teaching-learning context? To answer these questions, the author tried to compare the NOU graduates and dropout on their attitude toward several statements on teaching-learning context. Both of these two groups were ask to express their personal attitude toward the importance of eleven learning goal related items such as “being able to pass”, “being able to obtain personal growth”, “being able to obtain respect from friends”, “being able to apply knowledge to work” etc. The author conducted a factor analysis on these items and obtained three dimensions, they are “human-support oriented”, “growth oriented”, and “practical oriented”. Learners with higher “human-support oriented” were considered to be more reliant on human interaction and support (from instructors and peers) for their learning persistent since they react strongly to those humanity related items. Learners with higher “growth oriented” were considered to be more reliant on inner satisfaction obtained from learning for their learning persistent since they react strongly to those self-fulfillment related items. Learners with higher “practical oriented” were considered to be more reliant on practical goal related items for their learning persistent since they react strongly to those external achievement related item.

The author went into a more detail comparison on this three orientations between NOU graduates and drop-outs and found that NOU graduates group has significant difference from drop-outs group on its score of “growth oriented” and “human-support oriented”. NOU graduates gained higher score on “growth oriented” while NOU dropouts gained higher “human-support oriented” than the opposite group. This statistical difference might trigger questions such as “Is ‘growth oriented’ related to learning retention?” or “Is ‘human-support oriented’ related to dropout?” But when teaching-learning context is taken into consideration, we would find that it is much more reasonable to suspect that there exist some relationship between individual learning orientation and the characteristics of teaching-learning context. To be more specifically, in a Distance and Open institution such as National Open University in which independent learning as applied to each learner, tutor-learners and learners-learners interactions are often neglected or avoided in order to maintain “independency”. Therefore learners reply more on human interactions would find it difficult to adapt to, especially at the beginning of entering into an Open learning environment. Learners who adapt themselves well and successfully transmit their learning orientation from “human-support oriented” to “growth oriented” would find it easy to persist through their learning process. Yet the casual effect of different orientations on learning persistent and the mechanism of this transformation are there to be explored with a more advanced research project.

4.4 Is Individual’s Characteristic the Key Factor to Learning Retention?

It is usually assumed that self-growth oriented individuals would gain much more sense of achievement

in an independent learning context and are more likely to be successful in learning. We need more psychological empirical data to explain how individual learner handles learning difficulties and makes decision.

Is individual's characteristic the key factor to learning retention? Skilton-Sylveste (2002) conducted a research on Cambodian women who participated in ESL program which explored into the relationship between adult learning motivation and learning persistent. This research states that it is a new research orientation that learning motivation is seen as a combination of different aspects of a person, which is called "Motivation systems theory (MST)". In this system theory, motivation is not discussed simply as a learning orientation, learning goals, emotion and personal believes are included in discussion. Echoing Skilton-Sylveste, the author in this research believes that we should explore the impact of learners' personality and their beliefs on learning persistent.

According to the Successful Learning Model concluded from adult teachers' perspectives, acceptable sense of progress and academic achievement are the two important factors that motivate continuous learning. The weighting of each of the two factors is closely related to personal perceptions and beliefs and it is totally subjective for individual learner based on his/her own standard or criteria. For instance, from the content of interview with NOU learners, it is found that a certain grade is satisfactory for some individuals while frustrating for the others. It is also found that a felt change and sense of achievement would be a great reward to some individuals while obtaining credit is the most important reward to the others. Furthermore, it is often found among NOU drop-outs that learners incline to complain about the difficulties of the test or bad teaching for their frustration on low grades, at the same time, it is also often found among NOU graduates that learners would blame themselves for unsatisfactory grades and end up with more efforts in studying.

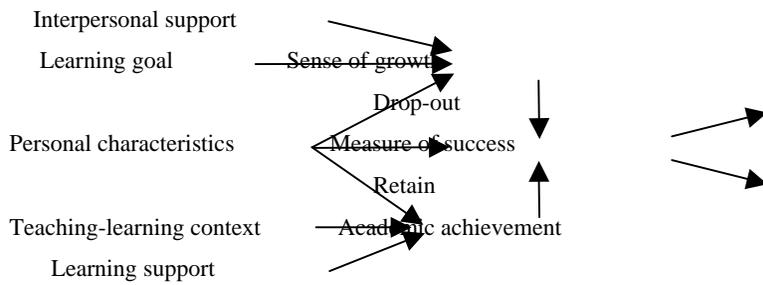
Individual learner would take different basis for sense of satisfaction and that is one of the statements supported in this paper. Personality may be used to explain it, for instance, positive or negative personality or personality typology (A and B types). Another angle could also be taken to explain the difference of personal difference on acquisition of learning satisfaction. According to Heider, individual would explain things based on two different attributions, one of which is inter-external attribution. Some individual would explain to themselves with factors that attribute to influence caused by others such as the difficulties of a task or bad luck while the others would explain to themselves with factors that attribute to themselves such as personal ability and level of efforts. Heider provides us a sound basis to understand that the orientation of learners' psychological attribution would clearly have an effect on their perception to reality. Negative learners would probably attribute their failure to others such as the bad teaching or difficulties of the test and this would probably introduce a more negative reaction toward their learning. When learners consider their failure is out of personal control, the idea of giving up would take place.

5. Conclusion

5.1 Adult Learning Process and Learning Retention Model

Learning is a series of psychological challenges. It takes both internal and external supports to accomplish the eternal goal of learning. Especially for a long-term learning activity, persistent is the essential basis for success. Concluded from the discussion based on the perspectives of adult teachers and NOU learners, individual and environmental factors are influential for learning retention either positively or negatively. For individual factors, learner's characteristics or personal perception and attribution are also included. Beyond all these influential factors discussed, the author considers that there exists a decision point that is critical for

retention. It is the point when each learner will measure the possibility of success in the future based on the result of both sense of progress and academic achievement and the price he/she is going to pay. The result of all these considerations would be retain or dropout.



Adult Learning Process and Retention Model

5.2 Building Up Positive Learning Experience – An Effective Enhancement of Learning Retention

Adult learning is a combination of psychological, environmental, and interpersonal challenges. Each of the dimensions needs to be taken care of well in order to conduct a successful learning. It is certain that instructor is unable to control every aspects of learning context, yet it is still possible for us to assist learners to make better adjustment to learning, either by introducing more positive thinking and learning strategies. How do we introduce learners to better learning? This is essential concern to every adult educator. Hsu & Huang (1996, Huang ed.) raised several strategies to enhance learning motivation: to arrange interesting learning activities, to satisfy learners' need of belongings, to understand individual learning experience, to provide opportunities of success, to set up proper expectation, to introduce effective learning strategies. These are very important principles to assist learners to maintain their learning interest. The author believes that these are also important to learners in a distance learning environment, yet a more intensive care needs to be taken for distance learning because they are no longer learning in a traditional environment which provides much more chance for human contact and support. The following are some points for references.

Based on the Adult learning process and persistent model in this paper, a positive learning experience is needed for learners to make positive decision. That is to say, learners need to have positive conclusion either in the sense of growth or academic achievement. According to the argument stated in this paper, there is no certain public standard to judge what would be the satisfactory level of sense of growth or academic achievement, yet the subjective perception is much important to individual learners. Therefore, it is important to provide assistance to each learner to build up their own strategy of self-encouragement and positive thinking to adopt positive learning experience during their learning process especially in a distance-learning context. A series of self-growth courses could be provided to learners at the beginning of any distance-learning program. Besides, positive teaching also is needed in order to increase positive learning experience. Encouragement and supportive interaction is the essence of positive teaching no matter this interaction is carried out through face-to-face or any channel of technology from an on-line forum or a telephone discussion. Technique of counseling such as encouraging individual to solve problem by introspection and self-affirmation is a good idea to apply when learners are confronting learning difficulties.

Feedback is another important strategy to employ positive learning experience because feedback is the media to sense of growth and academic achievement that could enhance learning persistent especially in an independent learning context. A well-structure and supportive feedback system could reduce the anxiety

from isolation and build up learner motivation to learn. A good feedback system in distance learning context needs to be weaved in every unit of learning materials. Feedback from instructors either in face-to-face tutoring sessions, on-line discussion or comment on homework is also extremely important as a part of human interaction and support.

As Woodley and Parlett proposed, learning process is a wrestle between the power of pull and push, it is for sure that every adult learner would have to strangle with negative power more or less in their learning process. The learning process and learning persistent model proposed in this paper provides adult educators a thought that we need to employ strategies that could enhance learning persistent, strategies that are effective to enhance learners' capacities of handling learning difficulties and to build up positive learning experience at the same time with all kinds of supportive learning design and interaction.

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international sub-systems: practical capability and specialty knowledge. In the middle of the 2 sub-systems there is the course system. Through experiment courses the undergraduates can reach their practical capability. Experiment courses play a substituted role in opening students' brain, encouraging their creativity and their

manipulation. In some western countries, experiment courses are an independent system to train students' ability.

The project research group think, the key to the curriculum reform must change from the theoretical knowledge to practice ability that the society needs, from the center of the teachers' teaching to that of the students' learning, from spoon-feeding knowledge to train the students' creativity and practice, from only one training mode to a variety of training modes, paying special attention to the practice ability and personality training.

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