



# RETENTION MODEL FOR WORK BASED LEARNING ADULTS

Kam Gill

Coventry University.

## ABSTRACT

Vocational education today includes, as it always has courses and programmes which teach important and valuable skills to a very high standard. Currently Further Education colleges are still using the most traditional methods of assessing Learners for the right course such as diagnostic testing. However Colleges retention rates are measured while the student's progress through various stages and levels within a program. The most frequently measured and publicly reported levels are retention and achievement which can be gauged after completing an academic year. The primary focus of this paper will be to investigate and focus on Engineering - Work Based Learning (WBL) on Adult courses.

It is evident that research has shown according to Finney et al (2009) that this is just the tip of the "ice berg" the underlying problems seems to be apparent that the learners are not quite up to the mark during the assessment processes for a course hence who don't succeed. Clearly organisations continuing to ignore this will have a financial implications and not finding suitable solutions for action for this growing concern.

**KEY WORDS:** Retention, Engagement, Further education, Work Based Learning.

## Introduction

Currently within education the lenses have changed and the outlook of the further education is rapidly changing. This change among others is due to demands placed by funding bodies as well as student's requirements. It can also be seen as student's progress further into their educational programs, they often identify additional motivators for continuing their education, including moral, emotional and quality of family life for preparation in their future occupation.

According to McEllory (2008) colleges prepare current students for future opportunities and compete for potential incoming students, they are being challenged to quantifiably identify whether students are engaging in educational practices that are preparing them for an increasingly diverse world of work. Astin (1985) and Kuh et al (2005) looked at various motivational tactics used to ensure students attended college, however this case study research has identified that there are a number of reasons that typically motivate students to devote the considerable personal and financial resources necessary to obtain a college qualification.

This particular research is based on a platform which identifies major sources of student departure on a course, these being: Student engagement, Student environment and Student esteem.

## Method

It can also be argued that the theory would not be solely applicable as learner's attitudes and perceptions can change. It is felt that it can be a direct result to mind-set of an individual and what makes an individual change can be nurtured by the correct guidance and support. The author feels that clearly retention can exist within all learning environments be it a school, college, training centre or university. It has been found by the author that within a college environment student retention is based on three common factors:

- Engagement, engage the learner in the subject,
- Contextualise curriculum
- Tutor, acts in a pivotal role

In addition to the above to be able to identify the suitability and the characteristics of a learner for the right course additional research and further analysis will be carried out on completion of the project. A generic model (scoring system) that can be applied to learners to assess key attributes for a course, in particular this will focus on results found from WBL and identifying the suitability of candidates for the right courses, are the right students enrolled on the right course? Why a student decides to leave mid-way through a course.

## Reason why a student may leave?

According to Straus et al (2004) when asked directly, students are not likely to say that they dropped out because of "lack of engagement". In a summary of the literature, Grayson et al (2003) found that there are so many difference between institutions it is difficult to generalise findings across research studies. Nonetheless, students will often cite both financial and academic reasons for leaving an institution.

According to Grayson (2003) studies they had found that there were several reasons for leaving such as, loss of interest in studies, lack of goals or motivation, dis-

appointment in their own performance, program difficulty, changing their mind about their programs or goals, attaining a job, or deciding to work as reasons for leaving. Grayson had asked the students the main reason for leaving, majority indicated that the course was not interesting and they had poor guidance, some specified that they had left for employment or work, and a very few had said their decision was related to finances or affordability. Although these students left without completing a credential, three-quarters described their experience as worthwhile and were satisfied with their overall experience with the program.

As student's progress from enrolment to completion, a complex interaction of four major factors is undergone, such as;

1. Personal
2. Social
3. Academic
4. Quality of their educational experiences

While these factors interact in ways unique to each student, studies across populations of students over time reveal there are patterns of behaviours associated with retention that can be distilled to serve as lessons about retention generally during primary and secondary schooling according to McGinvey (2003). Student perception of a course is vital, further analysis has identified levels of student engagement and teaching and learning. Student Perception in teaching at colleges, three lots of groups were asked random question chosen by students. The students were asked to select the top three areas they would like to see improved, specifically in regard to facilities and academic areas and teaching. Facilities, parking and food services were areas identified. Overall a large majority indicated their lecturers were encouraging and accessible to them. It is probably fair to assume that other groups suggested they would benefit of smaller class sizes.

## Results

Students of all types are least satisfied when they feel that they are not being listened to, or when justifiable complaints are not treated seriously. Changes made in response to feedback are taken as a positive sign that students are valued, and invariably lead to an enhancement in overall satisfaction with the experience of the college. Effectiveness of learner achievement and retention can be measured by a pre achievement test.

## Preliminary Research programme

This study utilised a preliminary assessment experimental design, this process will be broken down in steps so a clear and concise logic can be seen. Learners were randomly assigned to one of three experimental groups.

1. Engagement
2. Develop
3. Implement

## Learner Engagement

To understand the impact of active learner engagement, a definition must be identified. While there is not one definitive definition for engagement learning, it does appear that each attempt to define the term focuses on the learner actively participating in the learning process.

*"How students come to play a more active role in their education...as a direct*

result of their [educators] becoming more attentive, in sustained or routine ways to what students want to say about their experience of learning.” Zepke et al (2005)

**Developing the Learners**

Instructional strategies are a planned set of activities that are utilized to achieve an identified result Williford et al (2008) maintain that instructional strategies benefit both the learner and the tutor, both reliant on each other. The Tutors role is to engage the learners to be able to identify the learner’s needs in relation to learning styles prior to creating the instruction to ensure that appropriate materials are prepared to meet the educational objective. It is believed based on this theory that this proposed research will address three types of instructional strategies; Tutor, Engagement, and Curriculum.

**Implement Strategy**

This study was set up so that the student’s demonstrated engagement to a topic, the learner must at least attempt to provide the solution step or could not continue. Once the final steps for an example are shown, the next whole solution will be provided and the process begins again. Upon moving to the next page, feedback was provided on the correctness of the learner’s problem-solving attempts. Each set of problems consisted of four student tasks or steps.

- The students who were engaged were first presented with a completely worked-out example.
- Their second task presented the worked-out example with the first solution step intentionally missing.
- The third task presented the worked-out example with the second solution step intentionally missing.
- The fourth task presented the worked-out example with all three of the solutions steps missing.
- The students in the problem-based group were provided with a completely worked-out example followed by a problem-solving task.

Participants in this study were provided an instructional text on basic principles of engineering calculations. After reading this instructional text, participants were instructed to study the worked-out examples or problems provided.

Strange et al (2001) study, a pre-test consisting of nine simple problems was used to assess prior knowledge. The learning outcomes of the study were assessed by a pre-test that included 13 problems. Although not statistical significant, there were a difference within the groups pre-test scores in favour of the example-problem group. Other findings include no significant differences to time on task. With respect to pre-test differences, this study found a substantially higher means in the engagement group for the proportion of correct solution steps and for near transfer.

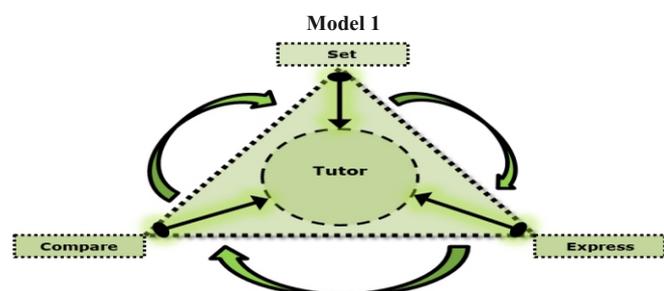
**Discussion**

**Findings within this case study**

During development of the Triangulation Model, It was soon realised that teaching and learning will play a vital role. It is felt that to understand the basics the way we learn and the way information is being taught. This is why from the three points of the Triangulation model Tutor and Student are clearly reliant and dependent on each another.

During the authors experience as a Tutor, one of the primary problems encountered within retention are:

- learners being on the wrong course
- learners being assessed during diagnostics which has been flawed and not followed through
- Wrong types of diagnostics tests or in some cases not being diagnosed at all.
- Teaching material not relevant to the learner or the subject
- Learners losing interest in subject, is it Tutor delivery being poor? During the authors experience this is probably the main cause for attrition.

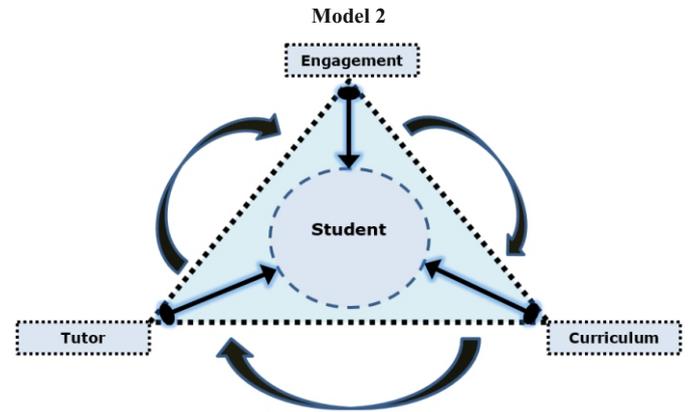


To firstly identify this problem a theory has been developed to link retention. The conceptual model focuses on institutional transformation to enhance student engagement across the institution to improve retention.

**Triangulation Model to express the 3 core concerns of focus**

This recognises that the case study college’s findings should focus on what is within their control to influence and that they can only change rather than wishing for a more homogenous or traditional student body.

The model reflects the importance of a triangulation model that has been devised to express the three core concerns of focus as mentioned above are that the learner engagement, curriculum, and input/influence from a tutor play a huge pivotal role.



**Purpose of the Study**

The purpose of this study was to identify the effectiveness of on learner achievement and retention as measured by a pre achievement test. To investigate this claim, the student’s learning style was identified and examined for a connection to the learner’s academic ability. To address these issues, the following research questions were examined.

1. What is the impact of learning strategies that promote learner involvement in achievement?
2. What is the impact on learning strategies that promote learner involvement on retention?
3. What is the relationship between learning style and achievement of learners who have used varying learning strategies?
4. What is the relationship between learning style and retention of learners who have used varying learning strategies?
5. What is the relationship between key learner characteristics (age, gender) and achievement of learners who have used varying learning strategies?
6. What is the relationship between key learner characteristics (age, gender) and retention of learners who have used varying learning strategies?
7. What is the impact of learner characteristics, learning style and type of learning strategy on achievement?
8. What is the impact of learner characteristics, learning style and type of learning strategy on retention?

**Limitations of the Study**

The participants for this study were students currently enrolled on Engineering Operations course (Work based learning/part time). As the request for participants was completely voluntary, the number of anticipated participants (60 – 80) was met. It is noted that this study focused on learning from text-based materials and the medium may have inhibited the learning performance of some participants.

**Significance of the Study**

This study set out to compare instructional strategies as well as to consider the effect of each participant’s learning style on achievement and retention. While all instructional strategies provide a benefit, this study attempts to identify the best suited instructional strategy for learning engineering. Due to the limited research on these strategies in this instructional context, this study may have impact on how engineering is taught in the future.

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