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Affecting the Classroom Psychological Environment (CPE) on approaches of student learning in Guilan University, Iran

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Abstract

This paper reports a case study conducted on an experienced based of the writer at Guilan University, into the affecting the Classroom Psychological Environment (CPE) on approaches of student learning in Guilan university. It focused on nine subscales of the CPE such as involvement, affiliation, teacher support, task orientation, competition, order & organization, rule clarity, teacher control and innovation. The paper concluded that the subscale of involvement had the largest discrepancy between preferred and actual form and the subscale of competition had the smallest discrepancy. The subscale of involvement also produced the highest mean in the preferred form indicating that students in general preferred a more affinitive classroom environment in which they can help each other with homework and have good relationship with others. While the subscale of competition resulted in Guilan University are greatly influenced by the examination system in that they prefer the actual very competitive learning environment in order to achieve higher grades.

Keywords: classroom, psychological environment, learning, approach, student

1. Introduction

According to Harden & Crosby (2000) found that teacher- cantered learning strategies as the focus on the teacher transmitting knowledge, from the expert to the novice. In contrast, they describe student- cantered learning as focusing on the students learning and what students do to achieve this, rather than what the teacher does. This definition emphasizes the concept of the student "doing" ("O’ Sullivan 2003) believes that the concept of student- cantered learning has been credited as early as 1905 to Hayward and in 1956 to Dewey's work. Lea et al (2003) emphasized that despite wide spread use of the term, maintain that one of the issues with student – centred learning is the fact that many institutions or educators claim to be student – centred learning in to practice, but in reality they are not.

Students feel differently in different kinds of classroom psychological environment (Walberg, 1969; Moos, 1974). Students' interest and motivation are encouraged in a socially cohesive and satisfying (CPE) and growth in
achievement and understanding are encouraged in an intellectually challenging CPE (Moos & Moos, 1978). Also, the term Student Centred Learning (SCL) is widely used in the teaching and learning literature. Many terms have been linked with student – centred learning such as – flexible learning (Taylor, 2000). Experimental learning (Bernard, 1999) self directed learning (O’ Neill & McMahon, 2005)

Many studies have investigated the person- environment fit hypothesis that student achieve better in their preferred CPE. Academic staff members have used information about discrepancy between actual and preferred CPE as a practical basis to guide improvements in their classrooms (Fraser, 1983; Hattie, Byrne & Fraser, 1986). Teachers facilitate learning by providing students with important feedback on their learning progress and by helping they identify learning problems (Stiggins, 2002).

Academic staff members see public examinations as the main influence on their teaching and they believe that an expository teaching style is the most efficient way of meeting what the examination syllabus requires of them and their students (Morris, 1985). The aims of higher education here appear no longer to be for broadening one's horizon expanding one's mind and developing one's potential to the fullest but for achieving high marks passing examinations getting a place in the university and striving for the future. On the other hand, there is counter evidence that students generally are lower on the surface and higher on the deep approach learning than (Biggs, 1990). Therefore, it has enough worth to investigate the actual learning approach.

The approach of learning investigated in past researches is a students’ actual approach to learning. However, human beings may like to explore and understand what is going on in the world so the preferred learning approach becomes an interesting area to study. The actual learning approach reflects what is currently adopted by students whereas the preferred learning approach reflects the intention which will in return influence the motivation of students in studying.

If we further relate the preferred learning CPE to the preferred learning approach, we can see a full picture of student preferred learning. Of course, different students may prefer different kinds of CPE which most fit their learning approach and learning behaviour. Hattie & Watkins (1988) found that there is a relationship between learning strategies and student preference for the classroom. Ramsden, Martin & Bowden (1989) found that University environments are associated with learning. The present paper is an attempt to investigate the relationship between CPE and approach to learning by answering the following questions:

1. What kind of CPE is preferred and perceived as actual by students in Guilan University?
2. What kind of learning approach is preferred and actually adopted by students in Guilan University?
3. Are there any discrepancies between the preferred and actual CPE and between the preferred and actual learning approach?
4. Is there any relationship between preferred and actual CPE and preferred and actual learning approach?

**Methodology**

Preferred and actual CPE were measured by the CPE scale (Moos & Ticket, 1974). There are nine subscales in the CPE scales: involvement, affiliation, academic staff support, task orientation, competition, order and organization, rule clarity, academic staff control and innovation (table.1). There are 36 items in the short from. The items are short statements of the true-false type.

Table 1: Nine subscales of the CPE scale

1. Involvement, Emphasis to which students have attentive interest participate in discussions do additional work and enjoy the class.
2. Affiliation, Emphasis to which students help each other get to know each other easily and enjoy working together.
3. Academic staff support, Emphasis to which the teacher helps befriends trusts and is interested in students.
4. Task orientation, Emphasis to which it is important to complete actives planned and to stay on the subject matter.
5. Competition, Emphasis placed on students competing with each other for grades and recognition.
6. Order & organization, Emphasis on students behaving in an orderly quiet and polite manner and on the overall organization of classroom activities.
7. Rule clarity. Emphasis on clear rules on students knowing the consequences for breaking rules and on the teacher dealing consistently with students who break rules.
8. Academic staff control. Emphasis on the numbers of rules how strictly rules are enforced and how severely rule infractions are punished.
9. Innovation. Emphasis on which the academic staff plan new unseal and varying activities and techniques and encourages students to contribute to classroom planning and to think creatively.

In this paper, the CPE was designed to be used in two different forms, the preferred and actual. Students were asked to answer the short form which consisted of 36 items on a 5-point scale, from 1 = never to 5= very often. The internal consistency of the preferred and actual CPE subscales alphas within the range of 0.15 to 0.80 and -0.05 to 0.70 respectively is reflected in median alphas of 0.70 and 0.80 respectively.

The subjects also completed the learning process questionnaire. In this study the LPQ was designed to be used in two different forms: student's preferred approach and actual approach to learning. The median internal consistency coefficients for the preferred and actual motive and strategy scales were 0.70 and 0.59 respectively. There was a tendency for the students to be more consistent in reporting their preferred rather than their actual learning approaches. 7 different faculties and 7 classes in Guilan University, 90 males 140 females were chosen. The data were coded and analyzed with the assistance of the SPSS program.

Conclusions and Discussion

Table 1 shows the mean preferred actual discrepancy of CPE subscales with standard deviations in brackets. Mean scores were higher for the student preferred from than the student actual form for all the CPE subscales. That is students tended to prefer CPE a more positive CPE to the actually encountered.

| Subscales          | preferred | actual   | mean Difference |
|--------------------|-----------|----------|-----------------|
| Involvement        | 19.69(2.9)| 12.48(2.1)| 4.20(2.5) **    |
| Affiliation         | 18.17(2.7)| 14.88(2.8)| 3.41(2.1) **    |
| Academic staff     |           |          |                 |
| Support             | 15.92(2.7)| 14.16(2.7)| 1.24(2.6) **    |
| Competition         |           |          |                 |
| Order & Organization| 16.91(3.0)| 12.73(2.4)| 3.18(2.4) **    |
| Rule clarity        | 16.50(2.9)| 14.51(2.8)| 1.99(3.0) **    |
| Academic staff     |           |          |                 |
| Control             | 16.36(2.9)| 15.12(2.4)| 1.24(2.9) **    |
| Innovation          | 15.53(3.3)| 12.19(2.6)| 2.34(2.6) **    |

** P<.001

The subscale of involvement had the largest discrepancy between preferred and actual form and the subscale of competition had the smallest discrepancy. The subscale of involvement also produced the highest mean in the preferred form indicating that students in general preferred a more affinitive CPE in which they can help each other with academic work and have good relationship with others. Also, they need more interaction with each other and with the academic staff. While the subscale of competition resulted in Guilan University are greatly influenced by the examination system in that they prefer the actual very competitive learning environment in order to achieve higher grades.

The overall picture of the preferred classroom however combines an affective concern with students as people who need help and support from each other and an intellectual challenge but tempered with a necessary current prevalence of working hard for academic rewards. This suggests that classrooms should be intellectually challenging to encourage growth in achievement and understanding while cohesive and satisfying classroom environments encourage student interest and motivation (Moos & Moos, 1978).

Table 2 shows the mean preferred actual discrepancy for the learning motive strategy and approach. Students reported greater preferred – actual discrepancies for deep and achieving motive strategy and approach while there
was no significant difference in strategy and approach while there was no significant difference in discrepancy for preferred and actual surface approach. In other words, many of the students would prefer to adopt a deeper and/or a more achieving approach but would not prefer to be any more surface than they already are. Table 3 shows the relationship between preferred CPE subscales and preferred learning approach. A strong correlation between the preferred CPE subscales and deep learning approach and achieving learning approach means that positive classroom environment is correlated with a deep or achieving approach. The environment is correlated with a deep approach to learning was found to be slightly stronger than the correlation between the preferred CPE subscales and preferred achieving approach to learning. As university attainment has been found to correlate positively with deep learning approach and intrinsic motivation if academic staffs can adjust CPE in the direction towards student preferred environment intrinsic motivation and deep learning may be achieved and better university attainment can be obtained.

### Table 3: mean preferred discrepancy for learning Motive strategy and approach (n=230)

(With standard deviations in brackets)

| Motive       | preferred | actual     | mean difference |
|--------------|-----------|------------|----------------|
| Surface      | 18.95(4.2) | 19.18 (3.5) | -0.23(3.8)     |
| Deep         | 22.55(3.9) | 17.37(3.4)  | 5.18(4.2) **  |
| Achieving    | 20.46(4.1) | 16.62(4.0)  | 3.84(3.7) **  |

| Strategy     | preferred | actual     | mean difference |
|--------------|-----------|------------|----------------|
| Surface      | 17.00(4.2) | 17.60(3.4) | -0.060(3.6)    |
| Deep         | 20.71(4.1) | 17.19(3.5) | 2.52(3.4) **  |
| Achieving    | 22.85(4.5) | 17.11(3.5) | 4.74(4.6) **  |

| Approach     | preferred | actual     | mean difference |
|--------------|-----------|------------|----------------|
| Surface      | 36.92(7.3) | 37.72(5.9) | -0.80(6.0)     |
| Deep         | 44.33(7.5) | 35.55(5.9) | 7.78(6.8) **  |
| Achieving    | 44.43(6.9) | 34.81(6.1) | 9.63(6.9) **  |

** P < .001

### Table 4: relationship between preferred CPE Subscales and preferred learning approach (n=230)

| Preferred learning approach | Surface | deep | achieving |
|-----------------------------|---------|------|-----------|
| Involvement                 | -0.14   | 0.59** | 0.39**    |
| Affiliation                 | -0.15   | 0.55** | 0.31**    |
| Academic. staff             |         |      |           |
| Support                     | -0.27*  | 0.43** | 0.29**    |
| Competition                 | 0.12    | 0.34** | 0.27*     |
| Order & Organization        | -0.28*  | 0.55** | 0.38**    |
| Rule clarity                | 0.03    | 0.51** | 0.36**    |
| Academic staff              |         |      |           |
| Control                     | 0.08    | 0.48** | 0.37**    |
| Innovation                  | -0.09   | 0.55** | 0.41**    |
Table 5 shows the relationship between actual CPE subscales and actual learning approach. No significant relationships between actual CPE subscales and surface approach were reported. The subscale affiliation, academic staff control and innovation were correlated with deep approach while the subscale affiliation, order & organization rule clarity academic staff control and innovation were correlated with achieving approach. The subscale of involvement got the highest correlation with the actual deep learning approach while the subscale of academic staff control got the highest correlation with the actual achieving approach. Furthermore the correlations between the preferred CPE subscales and the preferred learning approach were found to be stronger than the correlations between the actual CPE subscales and the actual learning approach.

Table 5: correlations between the actual CPE Subscales and actual learning approach (n=230)

| Actual learning approach      | Surface | deep | achieving |
|------------------------------|---------|------|-----------|
| Involvement                  | 0.13    | 0.23 | 0.16      |
| Affiliation                  | -0.05   | 0.37**| 0.23**    |
| Academic. Staff              |         |      |           |
| Support                      | 0.12    | 0.16 | 0.19      |
| Competition                  | 0.19    | 0.13 | 0.17      |
| Order & Organization         | -0.05   | 0.07 | 0.25*     |
| Rule clarity                 | 0.12    | 0.20 | 0.26*     |
| Academic. staff              |         |      |           |
| Control                      | 0.19    | 0.25*| 0.36**    |
| Innovation                   | 0.09    | 0.33**| 0.23**    |

Conclusions

This paper has extended previous knowledge by analyzing the relationship between both preferred and actual learning strategies and learning environments from the viewpoints of Guilan University students. Generally their perceptions of students as highly competitive and academic staff controlled and as encouraging rote learning is much as expected. Clearly many of the students would prefer their classrooms to be a friendly place where both students and academic staffs enjoyed working together and planning a variety of interesting but challenging activities. Such an environment would encourage both deeper and more achievement oriented learning strategies that most of these students would actually prefer. It seems, ways by which feedback to academic staff about the students perceptions of the classroom psychological atmosphere can lead to beneficial changes in the learning environment. Also, it indicates that the relationship for the preferred rather than the actual form. This finding suggests that in the day to day Guilan University classroom students who would prefer to be learning in a deeper way are constrained by the actual rigidity of be learning in an environment and the assessment system to adopt more superficial learning strategies. Thus some will modify their preferred learning approach possibly against their will but others will stick to their own preferences. However, when responding in terms of their preferences they are no longer constrained by reality they choose the CPE that they believe would allow them to learn in their preferred way. Student who prefer deeper or more achieving approaches have clear preferences for desired CPE but surface oriented students do not. As the formers preferences are, usually in an educationally desirable direction, more deep and achieving oriented it would be worthwhile discovering factors which may encourage students to stick to their preferences depict the realities of the classroom. The paper literature suggests that variables such as self monitoring, self esteem and locus of control would be worth investigating in this respect.
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