The Interplay of Learning Approaches and Preferences for Methods of Assessment of Iranian EFL Learners in academic Context

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Received: 01.02.2015; Accepted: 05.05.2015

Abstract. The present study aimed at making inquiries about the relationships between Iranian EFL students’ learning approaches, and their preferences for different modes of assessment. A sample of one hundred and ten junior and senior EFL students majoring in English Translation and English Literature at Shahid Bahonar University of Kerman, participated in this study. Participants were both male and female. In order to gather required data, two questionnaires were used: The Revised two factors Study Process Questionnaire (R-SPQ-2F) by Biggs et al. (2001), Assessment Preferences Inventory (API) by Birenbaum (1994). As the results showed; first, deep learning approach had significant positive relationships with both summative and formative assessments; second, surface learning approach had significant positive relationship with summative method of assessment.

Keywords: Learning approaches, Deep and Surface learning approaches, Assessment preferences, Summative and Formative assessment.

1. INTRODUCTION

With regard to the possible relationship between students’ learning and learning strategies, after a period of qualitative studies on the issues of learners’ learning experience, some research was carried out in order to assess quantitatively how students approach learning. In comparison with the pioneering work, which was carried out in the USA, the studies conducted concerning this research viewpoint had a more relational emphasis, which recognized that learning approaches are influenced by students’ perceptions of their learning environment (Biggs, 1987, 1999). The finding revealed that the way students approach a learning task resulted in determining the distinction between learning approaches by their emergence in terms of deep and surface learners (Biggs, 1999).

According to Choy et al. (2012), “deep learners are students who have the intention to look for meaning in the study materials by closely examining the content to sieve out the underlying concepts and relating these concepts to everyday life and one’s prior knowledge” (p.160). Surface learners, on the other hand, “are students who have the intention to only meet task requirements such as fulfilling course requirements or passing the examination” (p.160). The most common strategy adopted by surface learners is rote learning or memorising the presented materials. They tend mostly to remember the concepts that represent the knowledge without a deep understanding of the meaning of these concepts. Thus, they cannot internalize information (Byrne, et al., 2002).

Generally it is assumed that the deep learning approach results in “higher quality learning outcomes” and the surface approach to “lower quality learning outcomes” (Gijbelsa et al., 2005, p.328). In brief, students who adopt a surface learning approach are expected not to perform well in learning tasks relative to deep learners. Ramsden (1981) and Biggs (1987) introduced a third approach, besides deep and surface distinction, the achieving (or strategic) learning approach. Achieving learners refer to those who “aim to get high marks by optimising their efforts and by organising their time and study strategies to earn a good grade” (as cited in *Corresponding author. Mina RASTEGAR

Special Issue: The Second National Conference on Applied Research in Science and Technology

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Gijbelsa et al., 2005, p.329). Biggs (1991) asserted that achieving students’ focus is on performing well on the test, it is interpreted that they may perform better than surface learners.

In the contemporary researches, students’ approaches to learning and assessment preferences have emerged as two constructs which are highly related to the understanding of students’ learning experience and to the improvement of both students’ learning and quality of teaching process (Dogan et al., 2012). While the first one refers to how students deal with learning, which is determined by both their perception of context and their motivation, the second one refers to how one sees the role of the assessment itself in learning process, as well as the role of the learners in the learning and assessment process. Scouller (1998) and Gibbs (1999) argued that assessment of students’ achievement is an important factor in motivating students to adopt various deep learning strategies such as critical thinking, analysing, synthesizing, and making inferences. As Gijbelsa and Dochy (2006) findings show, “the literature on students approaches to learning suggest that deep learning approaches are encouraged more effectively by using assessment methods which aim at deep learning rather trying to discourage a surface approach to learning” (p.402).

In the last few decades, a shift towards a constructivist learning view has changed the role of assessment in educational system. The clearest change is represented by the notion of “assessment as a tool for learning” (Struyven et al., 2006, p.332). Today, it is realized that there are wide benefits of assessing on all stages of the learning process. Struyven et al. (2006) proposed that the nature of student learning is closely related to the student’s learning approach and consequently to the method through which they prefer to be evaluated. It means that the way in which a student thinks about learning, determines the way in which he/she deals with the task of assessment. Those studies which have examined students’ learning experience have usually focused on approaches to learning and assessment preferences separately. This study, therefore, aimed at investigating the relationship between learning approaches, and preferences for different modes of assessment among Iranian learners of English as a foreign language.

Learning Approaches: Concerning the first variable, learning approaches for accomplishing the present study’s aims were derived from two main bodies of work, namely Marton and Saljo (1984); and Biggs et al. (2001). Deep and surface learning approaches were identified in Marton and Saljo’s (1984) qualitative analysis of students’ reports of what they did when studying a specific academic material. In the course of the study a strategic approach to learning was realized, as well. This model was very complex and each main approach included several subcategories which resulted in structuring 90 items. Therefore, this study took Biggs et al.’s (2001) view of learning approaches with a focus on a simpler and more inclusive model based on the three concepts: reproducing, internalizing, and organizing rather than the original form of information processing. This model composed of affective (motive) and cognitive (strategy) components which are related to the different ways in which students experience and handle their learning process (Biggs et al., 2001). Two main approaches to learning and studying are following:

- Deep approach= deep study skills + intrinsic motives
- Surface approach= surface study skills + extrinsic motives

According to Biggs et al. (2001), a deep approach is evidenced by strategies such as: reflecting on what is being learnt, relating ideas, seeking meaning, and questioning, whereas; strategies that evidence a surface approach include: focusing on words and isolated facts, learning enough just to pass, routine memorizing, and being bound by the syllabus. The learner’s approach to studying can be shaped by many factors, including “prior experience, expectation of outcomes and perception of the learning context, as well as the context itself” (Sadler-Smith, 1996, p.368). Thus, two learners may adopt different approaches to studying in
the same context and a learner may adopt different approaches to studying in different contexts (Prosser & Trigwell, 1999). Despite the investigation made by Biggs (1999), that applying constructive theories of teaching encourages a deep approach to studying, there is evidence, even in Marton and Saljo’s work, that “it is quite easy to induce a surface approach … however, when attempting to induce a deep approach the difficulties are quite profound” (Marton & Saljo, 1997, p.53).

Assessment Preferences: With regard to the second variable of the present study, several studies have investigated assessment preferences earlier. Assessment is an umbrella term. Understanding of it varies, depending on how one perceives the role of the assessment itself in the educational system, as well as the role of the participants in both the education and assessment processes. Birenbaum (1997) discussed the main difference in terms of an “assessment culture and a testing culture”. The traditional testing culture is influenced by behaviourist learning theory, “the belief in objective and standardized testing and testing being separated from instruction” (p.79). In the last few decades, developments in teaching and a tendency towards a constructivist learning perspective, and a combination with perspectives of new learning environments have changed the role of assessment in educational systems.

New learning environments are originated from constructivist theory and intend to develop an educational context to “meet the challenge for today’s higher education, making the students’ learning the core issue and defining instruction as enhancing the learning process” (Davies & Le Mahieu, 2003, p.341). According to Van de Watering (2008) “the most fundamental change in the view of assessment is represented by the notion of assessment as a tool for learning” (p.650). In the past, assessment was understood as a means to determine students’ grades and to find out to what extent students had obtained the course’s objectives (i.e., summative assessment). As Gijbelsa et al. (2005) depicts, “today, there is a realisation that the potential benefits of assessing are much wider and impinge on all stages of the learning process” (p.330).

The primary purpose of student assessment is to support this type of learning. As Birenbaum (1997) claims, “learning is not possible without thoughtful use of quality assessment information by learners”. This is reflected in “Dewey’s (1933) “learning loop,” Lewin’s (1952) “reflective spiral,” Schön’s (1983) “reflective practitioner,” Senge’s (1990) “reflective feedback,” and Wiggins’s (1993) “feedback loop” ” (p.78). Regarding the higher education, both students and teachers are responsible for learning. If students develop their learning into life-long, independent, and self-directed process, “they need to be included in the assessment process so the ‘learning loop’ is complete” (p.77). Reflection and assessment are essential for learning. In this respect, the concept of assessment for learning (i.e., formative assessment) in contrast with assessment of learning (i.e., summative assessment) has emerged. In order to have an effective learning student need to be involved in the classroom assessment process. In the present study both traditional and innovative methods of assessment (i.e., summative and formative assessment) were focused.

1.1. Review Of Literature

According to Entwistle and Entwistle (1991), “dependent on the assessment method used, students tend to shift between ‘surface’ memorizing or ‘deep’ understanding approaches” (p.223). As a consequence, assessment should no longer only be considered as something which is separated from teaching and is given at the end of the learning process, but also as a powerful tool for improving deep learning strategies (Dochy & Mc-Dowell, 1997). The request for relating learning, instruction and assessment concerning the context of current learning theories, has led to changing views about assessment. Also, there is an emphasis on the incorporation of learning, instruction and assessment.
Gijbelsa and Dochy (2006) conducted a research to investigate relationships between hands-on experiences with formative assessment, students’ assessment preferences and their approaches to learning. The study showed that differences in assessment preferences are correlated with differences in approach to learning. Students’ preferences for assessment methods with higher order thinking skills are significantly lower than after involving with a formative assessment. Moreover, students also changed their approaches to learning after real experience with a formative mode of assessment. Surprisingly, this change resulted in a more surface approach to learning.

Struyven et al. (2006) investigated the approaches to learning before and after an experience with formative group assignments. In their study, students did not adopt a deeper approach to learning after the experience with this formative assessment. Whereas, a significant increase in the use of a surface approach to learning was found. In other words, they investigated the effects of the learning and teaching environment on students’ approaches to learning and compared a lecture based to a student-activating setting within the first year of elementary teacher education. Result showed that although students’ approaches were similar at the beginning of the course, a clear distinction was found after experiencing the lecture based and student-activating teaching and learning environments. But, the method encouraged students to adopt a surface approach to learning and students’ strategic approaches decreased significantly. In line with these findings, Nijhuis et al. (2005) and Segers et al. (2006) stated that students in a problem-based learning environment adopted more surface and less deep learning strategies than students in an assignment-based learning environment.

Dogan, et al. (2012) carried out a research to assess the correlation between the learning approaches (LA) and assessment preferences (AP) of 8th grade students from a private school located in Ankara, Turkey. In order to collect data, approaches and study skills inventory for students and assessment preference inventory” have been used. The results indicated that there are significant relationships between the two sets of variables. “In learning approaches set ‘Deep Learning Approaches’ variable has strongest influence on the canonical variate of its own set. On the other hand complex-constructivist assessment variable has the strongest influence on the canonical variate of assessment preference set” (Dogan et al., 2012, p.264). To carry out the present research the following research questions were posed.

1.2. Research Questions

1. Is there any significant relationship between students' deep learning approach and their assessment preferences for summative tests?
2. Is there any significant relationship between students' deep learning approach and their assessment preferences for formative tests?
3. Is there any significant relationship between students' surface learning approach and their assessment preferences for summative tests?
4. Is there any significant relationship between students' surface learning approach and their assessment preferences for formative tests?

2. METHOD

2.1. Participants

One hundred and ten male and female junior and senior students majoring in English Translation and English Literature at Shahid Bahinir University of Kerman participated in this study. Available sampling technique was employed in the present study as in this procedure all the available members of the population had an equal and independent chance of being included in the sample (Ary, Jacob, & Razavieh, 1972). The reason for selecting junior and senior was
that the researcher aimed to survey those students who had a good understanding towards language learning, adopting an appropriate approach to have an effective learning, being familiar with different modes of assessment including summative and formative assessments.

2.2. Instruments

Researchers employed the following questionnaires to investigate the relationship of EFL students’ learning approaches, and assessment preferences

1. The Revised Two Factor Study Process Questionnaire (R-SPQ-2F) by Biggs et al., 2001
2. Assessment Preferences Inventory (API) by Birenbaum, 1994

The First questionnaire, The Revised Two Factor Study Process Questionnaire, was developed by Biggs, et al. (2001). R-SPQ-2F has 20 items on a five-point Likert scale format. It is coded from 1 (never true of me) to 5 (always true of me). The items are about participants’ attitudes towards their studies and their usual ways of studying which are realized in two general terms including deep approach (items: 1, 5, 6, 9, 10, 13, 14, 17, 18) and surface approach (items: 2, 3, 7, 8, 11, 12, 15, 16, 19, 20). The questionnaire was developed before the insight into approaches to learning obtained from the intensive study of the approaches of Asian students (Kember, 1996). For this simple two-factor version of the SPQ (Study Process Questionnaire) the intention was not to develop scales which completely characterized the possible combinations of understanding and memorizing. This questionnaire was employed to ensure that the deep and surface approach items were consistent with the clearer descriptions which had emerged from this body of work. Wording of items intended to characterize surface motivation needed to show a tendency to minimize the cognitive level of the task rather than this career motivation. The used questionnaire was adopted from an Article on The Revised two Factor Study Process Questionnaire-R-SPQ-2F. Justicia et al. (2008) reported that its reliability is r=0.87.

The second questionnaire employed, was the Assessment Preferences Inventory (API), (Birenbaum, 1994). This scale originally contains 67 items in a Likert-type format designed to measure four dimensions of assessment, namely test format, cognitive process, modes of assessment including summative and formative assessments, and perception of assessment. For the present study’s purposes, the researchers selected only one dimension of the questionnaire, using a 5 point Likert-scale (from 1 = not at all to 5 = to a great extent). This dimension is relevant in order to answer the research questions.

The used dimension is assessment types including 12 questions about students’ preferences for different modes of oral (items: 12, 11, 7, 10), written (items: 5, 6, 1, 3, 4) and alternative tests (items: 2, 8, 9). The use of close-ended questions in the present inventory was based on the observations of Numan (1995), Babbie (2005), and Mackey and Gass (2005) who argued that these close-ended questions provide a greater uniformity of responses, are mutually exclusive and are more easily processed. The used questionnaire was adapted from an Article on Students’ Assessment Preferences, Perception of Assessment and their Relationship to Study Results. Van de Watering et al. (2008) reported the reliability of the selected part about r=.82.

2.3. Data Collection Procedures

The required data were collected during the last twenty minutes of the class period in the second semester of the academic year 1392-93 by one of the researchers. The questionnaires were attached together and distributed among the participants as one set so that each participant’s score could be matched later on. The participants were provided with twenty minutes to complete the scales. Before distributing the questionnaires, the researcher gave enough instruction on filling out the questionnaires and also talked about the significance of the
study. Furthermore, the participants were asked not put their names on the questionnaires to insure anonymity and increase the accuracy of obtained data as a reflection of their true feelings and emotions at that special time. They were told that there would not be any right or wrong answers to any of the items of the study’s questionnaires; therefore they should choose only one option that best described them. Also, they were reassured that the given information would remain confidential and be employed only for research purpose.

3. RESULTS

The descriptive statistics of the variables of the study are presented in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>Variance</th>
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<td>15</td>
<td>44</td>
<td>29.58</td>
<td>5.80</td>
<td>33.69</td>
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<tr>
<td>SA1</td>
<td>110</td>
<td>25</td>
<td>15</td>
<td>40</td>
<td>26.47</td>
<td>4.79</td>
<td>22.96</td>
</tr>
<tr>
<td>SA2</td>
<td>110</td>
<td>23</td>
<td>14</td>
<td>37</td>
<td>25.54</td>
<td>4.08</td>
<td>16.69</td>
</tr>
<tr>
<td>FA</td>
<td>110</td>
<td>12</td>
<td>3</td>
<td>15</td>
<td>9.32</td>
<td>2.67</td>
<td>7.13</td>
</tr>
</tbody>
</table>

Note:
DA= Deep Approach  SA1= Surface Approach
SA2= Summative Assessment  FA= Formative Assessment

3.1. Learning Approaches and Assessment Preferences

To consider the interplay of learning approaches and preferences for methods of assessment of Iranian EFL learners statistical test of Pearson Product Moment Correlation was conducted. The results of this statistical procedure is presented in Table 2 below and explained in detail in the following sections.

<table>
<thead>
<tr>
<th></th>
<th>SA2</th>
<th>FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA</td>
<td>.33**</td>
<td>.36**</td>
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<td></td>
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<tr>
<td>N</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA1</td>
<td>.24**</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>.009</td>
<td>.27</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

Note:
DA= Deep Approach  SA1= Surface Approach
SA2= Summative Assessment  FA= Formative Assessment
3.2. Analysis of the Relationship between DA and SA2

To consider whether there is any significant relationship between deep learning approach and preference for summative assessment (the first research question), a Pearson Product Moment Correlation was conducted. According to the (Table 2), the correlation coefficient of deep approach and summative assessment is 0.33 and its p-value (0.0004) is less than α=0.01. Thus, there is a positive moderate significant correlation. In other words as the value of deep learning approach increases, the value of summative assessment increases, too.

3.3. Analysis of the Relationship between DA and FA

To seek the answer of the second research question regarding the relationship between deep learning approach and preference for formative assessment, a Pearson Product Moment Correlation was conducted. As the (Table 2) above depicts, there is a correlation coefficient of 0.36 between two variables of deep approach and formative assessment. The p-value of the relationship is 0.00009 which is less than α=0.01. Thus, it can be interpreted that there is a positive moderate significant relationship between deep approach to learning and formative assessment.

3.4. Analysis of the Relationship between SA1 and SA2

In order to answer the third research question that seeks the relationship between surface learning approach and preference for summative assessment, researcher employed a Pearson Product Moment Correlation formula. The correlational coefficient between surface approach and summative assessment is 0.24 with the p-value of 0.009 which is less than α=0.01 (Table 2). Therefore, there is a low positive significant relationship between variables of surface learning approach and summative mode of assessment. Also, it is noteworthy to mention that because researcher used a part of Assessment Preferences Inventory, the correlation coefficients calculated in the present study are low.

3.5. Analysis of the Relationship between SA1 and FA

Considering the relationship between surface learning approach and preference for formative assessment (the forth research question) a Pearson Product Moment Correlation was conducted. As the results in Table 2 shows the correlation coefficient between surface approach and formative assessment is -0.10 with the p-value of 0.27 which is more than the significant level of α=0.05. As a result, there is no relationship between surface learning approach to learning and formative mode of assessment.

4. DISCUSSION

Concerning the first and second research questions of this study “Is there any relationship between students’ deep learning approaches and their assessment preferences (summative and formative)?”, the data obtained from the Study Processes Questionnaire and Assessment Preferences Inventory (API) were statistically analysed to find any significant relationships between participants’ selection of deep learning approach (DA) and preferences for either summative (SA2) or formative assessment (FA). The statistical test of Pearson Product Moment Correlations were conducted to investigate the first two research questions. The findings revealed that DA showed positive significant relationships with both SA2 and FA. Regarding the amount of correlation coefficients in both relationships, DA’s correlation with FA is stronger rather than with SA. It means that participants, who select a deeper learning approach,
intended more to involve in formative mode of assessment in terms of alternative tests in addition to taking summative assessment (e.g., standardized tests).

Considering the probable relationships between SA1 and different modes of assessment, namely summative (SA2) and formative assessment (FA) (research questions three and four); SA1 showed only a positive significant relationship with SA2. Such findings depicted that students, who benefit from deep learning approach, prefer both summative and formative assessments and those who select a surface learning approach has more tendency for selecting summative assessments. As a result, a deeper learning approach can influence on participants’ preferences for formative assessments and critical thinking. Also, the reverse relationship may be true. It means that learners who involve in alternative tests, their learning approaches gradually change to deeper ones. Thus, these results are in line with the findings of some studies (Birenbaum, 1997; Dogan et al., 2012; Gielen et al., 2003; Gijbels & Dochy, 2006; & Scouller, 1998;) showing that students prefer assessment methods with higher order thinking tasks. after experiencing the new formative assessment method it seemed to have a significant impact on their learning approach’s change from surface one to more deeper approach of learning. However, the result of the present study is in conflict with Nijhuis et al. (2005) and Struyven et al. (2006) reporting that trails to deepen students’ approaches to learning did not lead to preferences for formative assessment.

REFERENCES


