Descriptive valuation pattern in education and training system: a mixed study

Maryam Asadollahi Kheirabadi', Zahra Mirzaei
Department of Education, Islamic Azad University Yasouj Branch, Iran

Abstract
The aim of this embedded – mixed experimental model study is to implement the descriptive valuation pattern in the education and training department. In the qualitative section, this study includes lived experiences in three steps in which the experiences of the acquirers are identified through descriptive valuation pattern before and after the presentation of the independent variable (during and after that). In the quantitative section, semi-experimental research including a pre-test from 2 groups (experiment and control) and a post-test after the presentation of the pattern to the experiment group is presented. The population of the study in both sections (qualitative and quantitative) includes the students of Somaye institute in the city of Farsan. Using an equal sampling method, the students will be considered as participants. The research tool for collecting the experiences of the acquirers is a semi-structural interview. In order to analyze the primary data in the pre-test, we used a test. In the quantitative section and in order to estimate the validity of the test, we used items analysis and for the reliability test, we used the Cronbach’s alpha coefficient. In order to analyze the data in the qualitative section, we used content analysis and in order to determine the success level of the presented pattern, variance analysis test was used. The results showed that the students believe that the descriptive valuation pattern suffers from the bad condition and the integrated model that is presented can solve many problems related to the implementation of the descriptive valuation pattern.

Keywords: Descriptive Valuation; Primary School; Mixed Research

How to cite the article:

©2019 The Authors. This is an open access article under the CC By license

Introduction
The international effect and the challenges that the education system faces have led to the fact that many scholars believe that improving education quality is one of the most important necessities of the education system. In this respect, valuation is considered as one of the basic elements in the curriculum and many researchers believe that it can increase the quality of the education [1]. In general, any activity that is created for transferring, instigating and acquiring knowledge needs the educational valuation as a continuous and regular process to describe, guide and make sure of the educational activities quality (Sharifi, 2009).

Descriptive valuation is facing challenges and problems just like any other new plan or change. These challenges make the process of achieving the exact and complete valuation objectives difficult. The main principle in the new approaches is the valuation for learning rather than the valuation of learning.

The new methods have removed the students’ rankings by the valuator-teacher and make him/her sensitive to the students’ progress. These methods motivate respectful view about the learner and provide positive feedbacks. They also motivate continuous assessment rather than
memory-based approaches. It means that the aim of removing score valuation method is promoting the quality of learning experience at school and achieving better results in the learning process.

The descriptive valuation is not a new approach but it is a genetic valuation that tries to provide the descriptive feedback and a more complete version of the continuous valuation. This method uses a ranking scale for drawing the students' progress rather than score scale and because the descriptive valuation is a kind of qualitative valuation, it has the advantages of the latter method.

Altogether, in the primary schools of some Iranian regions, the descriptive valuation couldn't achieve its all objectives. However, some objectives of the education general deputy and education and training council are met, some more important realizations such as increasing the quality of learning level and using success process feedbacks are not met [2].

Since education just like other activities requires expenses, a question comes into our minds: how can we make sure that these material and human expenses are spent correctly? In other words, do the Iranian education system and its subsidiaries act along with the needs and interests of the society? Does the education system have a good view of the basic social needs?

These questions and many other ones can occupy the minds of people and make them think about the problem.

The Iranian students' performance in such studies, shows the urgent need to pay more attention to the correction and improvement of the education quality. Educational valuation system is one of the basic elements in the education system that relates the teaching and learning elements. Assessment of the valuation system and determining its challenges help the education system. In the traditional valuation system, the focus was on the objective and tangible results and all teachers and families concentrated on the scores and passing the school subjects. Giving a score or a rank has a negative effect on the learning and students forget the directives by receiving the scores or the ranks (Black, 2004).

So, this study tries to answer the following questions in order to implement the descriptive valuation pattern:

Qualitative: what perception do the learners have of the descriptive valuation pattern in the education system?

Quantitative: is there a significant difference between the scores in the pre-tests and the control?

Qualitative: how do the learners of the experiment and control groups define their simultaneous experiences?

Quantitative: is there a significant difference between the post-test scores of the experiment and control groups relative to the descriptive valuation pattern?

In summarizing the problems of the descriptive valuation pattern that are mentioned in the Iranian research, we can refer to the following:

- Lack of qualitative teachers and lack of teachers' and principals' knowledge about the objectives, features and the tools of the descriptive valuation pattern (Kalhor, 2009).
- Lack of necessary infrastructures to implement the plan (Mohajer, 2008).
- Inadequate and insufficient educational resources and on the job training for the executives and the high volumes of the books (Mir Hosseini, 2007).
- The inefficiency of the descriptive valuation in the populated classes [3].
- Inconsistency between the books and the educational CDs and the objectives of the plan (Ahmadi and Hassani, 2006).
- Inconsistency between traditional education and descriptive valuation [4].
- The tediousness of the descriptive valuation due to the variety of tools (Hassani, 2004).
- Inconsistency with the determined curriculum (Bimi Pour, 2011).

The conceptual model of the descriptive-qualitative valuation

In order to formulate and to implement the framework of the descriptive valuation pattern in the education system, we used the mixed method. The rationale to use this method is that regarding the objectives, questions and the variables of the study, using pure qualitative or quantitative is not sufficient. On the other hand, the mixed method has different types regarding the study objectives and questions, we used the Embedded mixed method design – experimental model. The rationale behind this choice is that we try to determine the extent to which the changes happen in the learners' experiences before, during and after the intervention. Thus, in this embedded experimental model, before going to the quantitative section, we first identify the primary experiences of the learners and then we implement the pre-test in the quantitative section to compare the information of the experiment and the control groups (in the selected periods). After imposing the independent variable and during the implementation, again we identify the experiences of the learners and then conduct the post-test to compare the final information of the two groups in the selected periods. Thus, we identify the final experiences of the learners about the descriptive valuation pattern. Finally, we conclude based on the qualitative and quantitative results.
The research method in three steps related to the qualitative section including identification of the learners’ experiences during and after the experimental period, before the beginning of the experiment, during it and after that is phenomenological and the research method in the quantitative section is semi-experimental pre-test and post-test with a control group.

The population of the study

The population of the present research includes in both qualitative and quantitative sections include the students of the Somaye institute in the city of Farsan. The participants were selected by the identical sampling approach. They were divided into two groups (experiment and control) through random determination.
Research tools
The research tool for identifying the learners’ experiences is in-depth semi-structural interviews. In order to assess the primary information in the pre-test and their success rate after using the independent variable (the descriptive valuation pattern), we used a test.

Data validation
In the quantitative section, we used item analysis for estimating the validity of the test. And for estimating the reliability of the test, we used the Cronbach’s alpha coefficient. We used the credit of the data resulted from learners’ experiences before, during and after the training through two techniques: a) the Credibility, b) dependability.

Implementation method
Based on the study objectives, it is expected that the following steps will be followed: After measuring the research literature and achieving the elements of the descriptive valuation pattern, a period is implemented in the experimental group but in the control group, the education process is as usual (the traditional method). Before the intervention (implementation of the descriptive valuation pattern). The learners’ experiences of the descriptive valuation are identified and in order to compare the information of the experiment and the control groups in the selected patterns, a pre-test is taken. After some modifications and implementation of the education with the descriptive valuation, during the process, the learners’ experiences are identified and then after the intervention finishes (education with two approaches: descriptive and traditional), a post-test is taken to compare the final information of the two groups. The learners’ final experiences about the teaching-learning process with the descriptive and traditional approaches are identified after the process. The results are obtained from a mixture of qualitative and quantitative data.

Data analysis
In the qualitative section of the study related to the learners’ experiences before, during and after the period implementation, we use content analysis. For the success rate of the educational period with a descriptive approach, we used the variance analysis test.

Conclusions
for the analysis in the qualitative section, the content analysis was used included the following steps: content analysis is a method for identifying, analyzing and reporting the contents in the data. This method can organize and describe the dataset in detail. However, this method goes beyond this objective and interprets different aspects of a research topic (Bravan and Clark, 2006). The content analysis includes several steps that are not necessarily linear but they are more likely recursive that entails forward and backward movements during the analysis. And, due to the fact that most extracted contents are in the theories and the principles based on the basic transformation documents of the education system, so the qualitative analysis approach of the present research is “the modified content analysis based on the transformation documents analysis according to three approaches to the curriculum: conceptual, methodological and structural”. This qualitative analysis approach includes the following steps:

1. Review and assessment of the research resources; in this step, based on the learners' interviews and other related resources, the primary mindset of the topic are formed for the researcher and based on the scholars’ idea the reliable and related resources were considered during the qualitative analysis process.

2. Inferencing the concepts and related messages from the interpretation of the selected text; in this step, in order to code all concepts related to the research topic and facilitate the recovery and process of the data, we created the main and sub-categories. Finally, the content map of the research was inserted in the QSR NVIVO software. After coding the data, a list of different data was identified.

3. Turning the interpreted messages into the main and sub-contents; on the third step, the messages were summarized and the similar contents were equalized.

4. Allocation of conceptual titles to the main and sub-contents; the next step in the coding process is the allocation of title for each concept. This step that is conducted by forwarding and backward movement between inferential concepts and the related texts finally leads to 33 main and sub-contents. This process is the result of the continuous comparing of the contents and recursive trend between them.

5. Documentation; during the coding of the contents, the notes and assumptions that show the relationship between the main contents (in order to create the main and sub-basins of the research pattern), the relationship between the sub-contents (in order to create the main contents) and the relationship between the main and the sub-contents (in order to create a hierarchical relationship between the contents elements) were documented.

6. Improvement of the titles and the main and the sub-contents; in order to improve, complete and modify the main and the sub-contents and the related concepts (qualitative validation based on
the consensus), while using Delphi technique (3 times), we considered the suggestions and ideas of scholars. 

7. The conceptual pattern; the main and the sub-contents were classified into three approaches. Thus, the final conceptual map of the research includes the similarities and differences between the sub-contents. This map also shows that there is no reasonable relationship between the descriptive valuation pattern and the learners’ perception, satisfaction, and etc.

We used variance analysis in order to assess the difference in the implementation of the descriptive valuation pattern on different primary school grades.

Table 1. Number, the mean and standard deviation on different grades

<table>
<thead>
<tr>
<th>Variable (school grade)</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth</td>
<td>34</td>
<td>14.12</td>
<td>4.118</td>
</tr>
<tr>
<td>Sixth</td>
<td>25</td>
<td>16.22</td>
<td>4.243</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>15.17</td>
<td>4.822</td>
</tr>
</tbody>
</table>

Table 2. The variance analysis test on different grades

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total squares</th>
<th>Freedom</th>
<th>Squares mean</th>
<th>Test strength</th>
<th>Significance level</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation of the descriptive valuation pattern on different grades</td>
<td>144.109</td>
<td>2</td>
<td>72.055</td>
<td>3.214</td>
<td>0.044</td>
<td>There is a difference</td>
</tr>
<tr>
<td>Inside the group</td>
<td>2645.775</td>
<td>118</td>
<td>22.422</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside the group</td>
<td>2789.884</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 and table 2 show the variance analysis test for the common perception of the students about the descriptive valuation pattern on different grades.

The descriptive statistics data in table 1 shows that the highest mean is for the sixth grade and the lowest mean for learning is in the fifth grade. The inferential statistics data and the variance analysis test result in table 2 show that there is a significant difference between the common perception of the descriptive valuation pattern among different grades. P<0.05 so the null (zero) hypothesis is rejected (or the research hypothesis is confirmed).

Discussion and conclusion

Based on the research findings we concluded that in the qualitative section, based on the content analysis of the interviews, the students are more inclined to use the integrated pattern of the descriptive valuation that is according their common understanding of the pattern. The results of the variance analysis test in the quantitative section indicate the abovementioned result. That is why the issues such as valuation time, valuation method, scoring system (1-6), home report, voluntary and involuntary subjects, coordinated exam, midterm score and etc. [5]. Motivating the students and make them like the subjects need a systematic curriculum and consecutive steps including valuation. The aim of valuation is to service education. On the other hand, if the teacher and student know the effectiveness of such activities and learning efforts, they will be motivated to continue their teaching-learning process. Thus, pure quantitative and qualitative valuation results (0-20) cannot cover all aspects of the educational progress valuations. So, we can use the conceptual model and the integrated descriptive valuation pattern as a valuation model.

Suggestions

Training courses and workshops can empower human resource and also promote their insight into traditional/descriptive methods. Reviewing the curriculum content of the primary school based on the new valuation patterns Providing the basis for families’/students’ participation in the valuation process.

References

4. Khoshkholgh, I. 2007. The pilot implementation of the descriptive valuation plan in the primary
schools of some regions in Iran. *Education and training quarterly.* Vol. 4. Year 120: 22 – 132