Examination of the Impact of Descriptive Evaluation on the Academic Achievement of Students in the Evaz Region

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ARTICLE INFORMATION	*ABSTRACT*
	Background and Aim: This study examines the impact of descriptive evaluation on the academic achievement of students in the Evaz region. **Methods:** It is an applied research study in terms of its objective and a descriptive-survey type in terms of its execution. The statistical population of the study includes all teachers in the Evaz region during the academic year 2017-2018, totaling 604 individuals (258 women and 346 men). Using the Morgan table and stratified random sampling, a sample of 236 individuals (101 women and 135 men) was selected. Research data were collected using academic achievement and descriptive evaluation metrics. The content validity of the research questionnaires was confirmed by experts. Additionally, using factor analysis, the validity of the descriptive evaluation questionnaire was confirmed at 0.93 and the academic achievement questionnaire at 0.86. The reliability of the research questionnaires was also determined using Cronbach's alpha method, with the descriptive evaluation questionnaire at 0.90 and the academic achievement questionnaire at 0.92. The obtained data were analyzed using descriptive and inferential statistics. **Results:** The research results indicated that descriptive evaluation has a significant impact on students' academic achievement. **Conclusion:** The principal should identify the existing knowledge in the school, making it accessible and extractable. To achieve this, the principal should create a platform for expanding human interactions and relationships within networks to uncover and extract implicit knowledge.

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Introduction

Descriptive evaluation is a model that aims to focus on educational and learning criteria and the depth and quality of students' learning rather than quantitative measures, providing an explanation and description of their status. For successful inclusive education, conditions must be prepared. Teachers need to have confidence in the ability of students to progress in a regular classroom and prepare other students to accept peers with disabilities. Attention to creativity criteria and student growth in terms of creativity concepts plays a significant role in students' academic progress. According to Moayyedi (2013), the creation of ideas and new concepts has always been the basis of inventions, discoveries, and the emergence of appropriate solutions to human problems. Advanced and civilized societies of the past and present have consistently recognized the value and importance of this aspect of human intellectual and mental abilities, striving to strengthen it, thus achieving development, welfare, progress, and happiness. As Aristotle posited, innovation is considered the sole effective factor in human progress. In traditional education, evaluation is the final step used to decide on the promotion of learners to higher academic levels. Currently, evaluation is an inseparable and concurrent part of the learning process, focusing on guiding students' learning rather than classifying them (Sharifi, 2014). Therefore, evaluation is an integral part of the learning process, with more than three-quarters of instructional time dedicated to evaluation, emphasizing novelty and creativity. Descriptive evaluation methods involve a teacher assessing the changes and developments in a student using various techniques, then providing detailed feedback based on predefined progress indicators or objectives to the student and their parents (Moghni Zadeh, 2012).

Examining the evaluation systems of different countries reveals that the use of descriptive report cards is common and has a long history. In France, the grading method uses a spectrum with descriptive phrases such as above standard, meets standard, below standard, etc. In Germany, there are six categories, and in Japan, five concepts are used alongside descriptive sentences. In many countries worldwide, report cards do not merely include raw scores but describe and evaluate all activities, skills, and attitudes of the child. Simply providing scores creates competition and anxiety, affecting students' learning and academic progress, causing depression, and wasting a significant portion of potential human and economic resources. Excessive importance given to exams, their repetition, and instrumental use causes disinterest in education, with exams marking the end of learning and a form of escape from study (Jalali, 2013).

Descriptive evaluation is a term recently introduced in schools, opening a new perspective in analyzing and diagnosing social and economic issues (Hosseini, n.d.). This approach in educational evaluation involves collecting, analyzing, and interpreting information regarding academic progress using various assessment tools. Moreover, by reviewing students' status, it addresses potential weaknesses, improves and deepens learning, and fosters holistic growth. Descriptive evaluation aims to create a cheerful and vibrant classroom environment where students can learn better and more deeply (Sharifi, 2014). It shifts focus from end-of-year exams and scores to the learning process throughout the academic year, considering students' emotional, social, and even physical growth. Descriptive evaluation is an educational-assessment approach where the teacher, with the active participation of students and their parents, collects information on students' efforts, progress, and achievements using various tools, helping them learn better and address learning problems with the support of parents and teachers (Hosseini, 2012).

Evaluation is a systematic process of collecting, analyzing, and interpreting information to determine whether intended objectives have been achieved or are being achieved, and to what extent (Hosseini, 2012). Worthen and Sanders, two experts in educational evaluation, stated that "in education, evaluation is an official activity conducted to determine the quality, effectiveness, or value of a program, product, project, process, goal, or curriculum." For instance, a curriculum evaluator first determines the overall objectives or goals of the curriculum, then collects necessary input from relevant reference groups, gathers necessary information for evaluating those objectives and any side effects, analyzes and interprets the collected information, and ultimately judges the value of the curriculum, typically providing suggestions to decision-makers (Saif, 2012).

Popham believes that evaluation involves systematically assessing the educational value of phenomena. Popham states that evaluation is a formal activity where efforts are made to gather information about the phenomenon under investigation, using the collected information to reach a judgment about its value. Cronbach sees evaluation as collecting and using information for decision-making regarding an educational program. He believes that determining the success or failure of educational programs is only possible through collecting information in real teaching-learning situations, and any decision about an educational program must be based on collected information (Hosseini, 2012).

Bazargan (2012) believes that evaluation involves determining and providing necessary information about the desirability of objectives, operational programs, implementation plans, and their outcomes to guide and decide on improving activities to achieve desired results. Stufflebeam and Shinkfield, in their book on systematic evaluation, offer a comprehensive definition, describing it as the process of determining, obtaining, and providing descriptive and judgmental information about the value and desirability of objectives, plans, implementation, and results to guide decision-making, serve needs, and enhance understanding of phenomena (Mojabi, 2012).

Research by Brookhart, Moss, and Long (2014) on the role of formative evaluation and feedback in compensatory classes showed that reflecting progress results to students and supervisory observations during instruction can significantly impact progress in both practical and theoretical subjects. Hashimoto (2013) conducted research in Japan, indicating that descriptive evaluation is most effective and efficient when training one or a limited number of trainees for a specific job at a time. The major advantage of descriptive evaluation is that the learner understands the tasks they are responsible for and becomes familiar with the tools they must use. Christopher Damian (2013) found that expanding self-evaluation strategies promotes reflective thinking in students, resulting in cognitive responses about their learning. He also noted that immediate, unambiguous, and metacognitive feedback are key factors in determining the effectiveness of descriptive feedback, enhancing self-regulation, facilitating learning, and improving academic achievement. Kotoulasov's findings (2012) indicate that descriptive evaluation increases communication between home and school, learning ability, academic performance, self-confidence, precise planning for students, and correct guidance. Kemp and Tepperov (2011) conducted a study in England on student evaluation using portfolios, concluding that using portfolios activates and makes learners independent, creating intrinsic motivation. Hamedi (2014) conducted research titled "Evaluation of the Implementation of Qualitative Descriptive Evaluation Program in the First Grade of Elementary Schools in Semnan and Mehdi Shahr." The results showed that the program's goals were achieved, and the overall opinion of the program was positive. The most significant achievement was increased mental health in the teaching-learning environment, and the greatest challenge was the lack of teacher awareness and large class sizes. Kopaei (2014) examined the impact of descriptive evaluation on the performance of elementary school students in Qaemshahr, finding that descriptive evaluation significantly affects student performance, learning indices, participation, mental health, and creativity.

A study titled "Examining the Relationship between Descriptive Evaluation and Religious Behavior among Third Year High School Students in Golestan Province in 2012" by Majedi, Seyyed Masoud, and Lahsayi Zadeh, Abdolali focused on the sociology of religion and students' religious issues. The results indicated that increased social relations increase traditional religious behavior, and there is no significant relationship between descriptive evaluation and pluralistic religious behavior, rejecting the main hypothesis. Ghanei Rad (2012) examined the role of student-teacher interactions in forming university-level descriptive evaluation, showing that student relationships with teachers are low, and background variables influence these relationships. Increased student-teacher interactions lead to higher academic achievement and effectiveness. Hosseini (2012) conducted research on the implementation of descriptive evaluation in elementary schools in Tehran, indicating that relative societal inclination towards innovation, positive attitudes towards descriptive evaluations, and teachers' literacy are positive factors, while

positive attitudes towards traditional evaluation are negative factors.

According to Qara Dagi (2015), one of the main objectives of the education system is to train free-thinking, responsible, truth-seeking, courageous, active, and creative individuals. The system can achieve its goals only by fundamentally transforming itself in line with changes in various sectors of human society, particularly in learning theories. Evaluation of goal achievement is the responsibility of the evaluation system, and educational evaluation is a crucial factor in improving learning and progress. The descriptive evaluation system in elementary education aims to fundamentally change the Iranian education system, focusing on modern teaching-learning approaches and shifting from knowledge-based to capability-based evaluation. In this system, attention to academic progress and creativity in descriptive evaluation is crucial. This research aims to examine the impact of descriptive evaluation on the academic achievement of students in the Evaz region from different perspectives.

Therefore, process-based or descriptive evaluation as a criterion for evaluating students' learning processes should encompass the growth of learners in skills and academic progress. This study seeks to answer the fundamental question of whether descriptive evaluation has a significant impact on the academic achievement of students in the Evaz region. The research aims to answer the following questions:

Does grading affect the academic achievement of students in the Evaz region?

Does feedback affect the academic achievement of students in the Evaz region?

Does the textbook affect the academic achievement of students in the Evaz region?

Methods and Materials

This study examines the impact of descriptive evaluation on the academic achievement of students in the Evaz region during the 2017-2018 academic year. The research is applied in nature and descriptive-survey in data collection. The statistical population includes teachers in the Evaz region, totaling 604 individuals (258 women and 346 men), according to the 2017-2018 education department data. Using the Morgan table and stratified random sampling, a sample of 236 individuals (135 men and 101 women) was selected. Data collection is field-based, and theoretical and empirical foundations are gathered from books, journals, and reputable scientific websites, making it library-based .

The data collection tool includes a questionnaire with two parts: assessing descriptive evaluation dimensions (grading: items 3, 5, 11, 14, 16, 19, 20; feedback: items 1, 2, 4, 8, 10, 12, 15; textbook: items 6, 7, 9, 13, 17, 18) and academic achievement (items 1 to 33). The 33-item questionnaire uses a Likert scale (1: completely agree, 2: agree, 3: relatively agree, 4: neutral, 5: relatively disagree, 6: disagree, 7: completely disagree) .

The content validity was confirmed by an advisor, and Bartlett's test of sphericity was used for factor analysis. Results show KMO values above 0.7 for all research components, indicating appropriate validity. Cronbach's alpha was used to determine reliability, with results shown in the table below. Coefficients indicate that questionnaire items align with research objectives and topic. Kolmogorov-Smirnov test assesses data normality, followed by descriptive (tables, frequencies, percentages, means, charts, medians, modes, standard deviations, minima, maxima) and inferential statistics for data analysis. Regression analysis examines research questions, and Friedman test ranks research components. Data analysis and statistical tests are performed using SPSS software.

Results

In this section, the descriptive information obtained from the research questionnaires, which indicate the demographic characteristics related to the sample under study, is examined. In this study, 57.2% of the respondents were men, and 42.8% were women. The majority of respondents, 51.7%, had a bachelor's degree, 25% had a master's degree or higher, 21.2% had an associate degree, and the smallest number, 2.1%, had a high school diploma. Most respondents, 30.9%, had 11 to 15 years of teaching experience. Additionally, 17.8% had 1 to 5 years of experience, 21.2% had 6 to 10 years of experience, and 30.1% had over 15 years of experience.

Table 1. The Impact of Descriptive Evaluation on Students' Academic Achievement								
Variable	β	Standardized B	t	p-value	R	R²	F	p-value
Descriptive Evaluation	1.309	-	4.910	0.000	0.539	0.291	96.201	0.000
Academic Achievement	0.751	0.539	9.799	0.000				

Given the F-value and p-value for the main research question, which are less than 0.05, it can be inferred that the regression is significant at the 0.05 level. The coefficient of determination obtained from the test is 0.291, indicating that 29.1% of the variations in students' academic achievement are explained by descriptive evaluation. The correlation coefficient from the test is positive and equal to 0.539, meaning that the relationship between these two variables is direct. Thus, the relationship is confirmed, and descriptive evaluation has a significant impact on students' academic achievement in the Evaz region.

Table 2. The Impact of Grading Dimension on Students' Academic Achievement								
Variable	β	Standardized B	t	p-value	R	R²	F	p-value
Grading	1.205	-	4.433	0.000	0.538	0.290	95.508	0.000
Academic Achievement	0.764	0.538	9.773	0.000				

Given the F-value and p-value for the first research question, which are less than 0.05, it can be inferred that the regression is significant at the 0.05 level. The coefficient of determination obtained from the test is 0.290, indicating that 29% of the variations in students' academic achievement are explained by the grading dimension. The correlation coefficient from the test is positive and equal to 0.538, meaning that the relationship between these two variables is direct. Thus, the relationship is confirmed, and the grading dimension has a significant impact on students' academic achievement in the Evaz region.

Table 3. The Impact of Feedback Dimension on Students' Academic Achievement								
Variable	β	Standardized B	t	p-value	R	R²	F	p-value
Feedback	1.557	-	4.624	0.000	0.434	0.388	54.186	0.000
Academic Achievement	0.713	0.434	7.361	0.000				

Given the F-value and p-value for the second research question, which are less than 0.05, it can be inferred that the regression is significant at the 0.05 level. The coefficient of determination obtained from the test is 0.388, indicating that 38.8% of the variations in students' academic achievement are explained by the feedback dimension. The correlation coefficient from the test is positive and equal to 0.434, meaning that the relationship between these two variables is direct. Thus, the relationship is confirmed, and the feedback dimension has a significant impact on students' academic achievement in the Evaz region.

Table 4. The Impact of Textbook Dimension on Students' Academic Achievement								
Variable	β	Standardized B	t	p-value	R	R²	F	p-value
Textbook	1.139	-	4.164	0.000	0.544	0.296	98.322	0.000
Academic Achievement	0.780	0.544	9.916	0.000				

Given the F-value and p-value for the third research question, which are less than 0.05, it can be inferred that the regression is significant at the 0.05 level. The coefficient of determination obtained from the test is 0.296, indicating that 29.6% of the variations in students' academic achievement are explained by the textbook dimension. The correlation coefficient from the test is positive and equal to 0.544, meaning that the relationship between these two variables is direct. Thus, the relationship is confirmed, and the textbook dimension has a significant impact on students' academic achievement in the Evaz region.

Using the Friedman test, the ranking of the components can be compared. The results of this test are shown in Table 5:

Table 5. Friedman Test Results for Comparing the Mean Ranks of Components				
Components	Mean Rank	N	df	p-value
Feedback	2.33	236	2	0.000

Textbook	1.85
Grading	1.82

It can be observed that the p-value is less than 0.05, therefore, it can be concluded that there is a significant difference between the mean ranks of the examined variables. The lowest mean rank is related to grading, which is 1.82, and the highest mean rank is related to feedback, which is 2.33.

Conclusion

In this study, 57.2% of the respondents were men, and 42.8% were women. The majority of respondents, 51.7%, had a bachelor's degree, 25% had a master's degree or higher, 21.2% had an associate degree, and the smallest number, 2.1%, had a high school diploma. Most respondents, 30.9%, had 11 to 15 years of teaching experience. Additionally, 17.8% had 1 to 5 years of experience, 21.2% had 6 to 10 years of experience, and 30.1% had over 15 years of experience. The research results show that regression is significant at the 0.05 level. The coefficient of determination obtained from the test is 0.291, indicating that 29.1% of the variations in students' academic achievement are explained by descriptive evaluation. The correlation coefficient from the test is positive and equal to 0.539. Thus, the relationship is confirmed, and descriptive evaluation has a significant impact on students' academic achievement in the Evaz region.

Explaining the results indicates that using descriptive evaluation significantly improves students' academic achievement. This hypothesis aligns with the findings of other researchers, including Abutalebi (2018) and Rezaei (2017). Since the results of this research are consistent with previous research findings, it can be said that it has a strong theoretical foundation, and its hypotheses are based on reliable theoretical bases. The research results show that regression is significant at the 0.05 level. The coefficient of determination obtained from the test is 0.290, indicating that 29% of the variations in students' academic achievement are explained by the grading dimension. The correlation coefficient from the test is positive and equal to 0.538. Thus, the relationship is confirmed, and the grading dimension has a significant impact on students' academic achievement in the Evaz region.

It is suggested to teachers in the Evaz region to consider the following to develop descriptive evaluation and improve students' academic achievement in their schools:
- Given the internal correlation of descriptive evaluation variables, the principal can create and strengthen an appropriate school environment and culture to expand each dimension and increase the level of descriptive evaluation.
- The principal should identify the existing knowledge in the school, making it accessible and extractable. To achieve this, the principal should create a platform for expanding human interactions and relationships within networks to uncover and extract implicit knowledge.
- The principal should eliminate cumbersome regulations, redundant work methods, and lengthy hierarchical processes to reduce unnecessary bureaucracy in the school.

Future researchers are advised to consider the following in their studies:
- In examining descriptive evaluation, to increase the validity of the research, intra-group and inter-group descriptive evaluations should be separately assessed.
- Given the numerous models presented on descriptive evaluation and students' academic achievement, researchers can use other models as appropriate in their studies.
- This thesis examines the impact of each dimension of descriptive evaluation on students' academic achievement. Future researchers can investigate the impact of descriptive evaluation on each component of students' academic achievement.
- The statistical population of this study consists of elementary school teachers in the city of Evaz. Future researchers are advised to conduct similar studies in other provinces or schools and compare their results with those of this study.

This study also faced limitations:

- Very few studies have examined the relationship between descriptive evaluation and students' academic achievement together, making access to related research a significant limitation of this study.
- Essentially, research has limitations and challenges that may affect the validity and reliability of the study. These limitations are especially pronounced in survey research, which primarily uses questionnaires to collect data. In addition, survey research, stemming from the positivist paradigm, requires legality and rationality in the social reality context. Fear and distrust of such studies by respondents, and reluctance to express genuine opinions due to specific social and cultural reasons, make it practically difficult to obtain accurate information, potentially affecting research results. Therefore, identifying limitations and challenges is a crucial component of any scientific research, and some of these are noted here.
- The level of cooperation from some individuals due to conservatism and general distrust of such research.
- The level of correct cooperation from some teachers in such research.
- The provision of accurate information by some teachers who possess such information, considering their social and specific regulations, which usually hinder the timely execution or progress of the research.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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