

## The Impacts of a Nationwide High-Stakes Test from High School Teachers and Principals' Perspectives: A Qualitative Study

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### Abstract

Iranian National University Entrance Exam (INUEE) as a nationwide high-stakes test is held annually to screen Iranian high school graduates and admit them into higher education programs in universities. This high-stakes examination has a wide range of impacts on test takers as the primary stake-holders and the parents, teachers, and high school principals as the secondary stakeholders. As a part of a larger project, this study reports the impacts of INUEE on high school teachers and principals. To this aim, 27 teachers and 18 principals from three western provinces of Iran sat for a structured interview. Each interview lasted nearly 30 minutes. All the interviews were audio-recorded and transcribed. Next, following the Grounded Theory (Glaser & Strauss, 1967) as the basis of analysis, the transcriptions were subjected to word-by-word content analysis to extract common patterns and recurring themes. Content analysis was applied to codify the transcribed interview data through an inductive process of frequent moving back and forth to extract common patterns and recurring themes of the data. After coding and 'quantitizing' the data (Dörnyei, 2007), the basic themes were identified, frequency counted, and tabulated. The results indicated that from the majority of the participants' perspective, the INUEE has detrimental consequences for students, teachers, school principals, and the educational curriculum. The findings of the study underscore the consequential invalidity and unfairness of the test and its negative impacts on different aspects and layers of the educational system. The findings of the study provide practical implications for educational policy-makers, school principals, and teachers highlighting the necessity of their awareness of the negative consequences of INUEE.

**Keywords:** high-stakes test; impact; INUEE; Iran; test fairness; test usefulness

### 1. Introduction

Ever since the beginning of the scientific stage of educational testing and assessment around the second half of the twentieth century, the pros and cons of large-scale high-stakes testing have been at the researchers' and educational testing experts' focus of attention. Accordingly, efforts have been made to investigate whether large-scale high-stakes testing has produced the desired outcomes for the education systems or whether it has ruined creativity in the classroom (Bracey, 2003). The results of such efforts and projects have been rather mixed in nature. While a number of studies reported positive effects of high-stakes testing (e.g., Buck et al., 2010; Misco et al., 2011; Segall, 2003), a greater number of them have suggested that high-

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stakes testing can have detrimental impacts on students' achievements (Gonzalez et al., 2017). As Buck et al. (2010) pointed out, studies reporting a negative impact of high-stakes testing have outnumbered those indicating positive effects nine to one.

The consequences or impacts of a test are defined as “any of the effects that a test may have on individuals, policies or practices, within the classroom, the school, the educational system or society as a whole” (Wall, 1997, p. 291), and have roots in validity theory (Bachman, 2005; Chalhoub-Deville, 2009; Cronbach, 1988; Kane, 2013; Lynch, 2001; McNamara, 2008; Messick, 1989; Shohamy, 2001). A critical question in the considerations of validation has been who is responsible for dealing with such test consequences. Traditionally, this issue has not been appropriately addressed in educational measurement studies in general (Kane, 2006; McNamara, 2008; Nichols & Williams, 2009; Shohamy, 2001). More recently, however, the discussion of the consequences of a test has become an integral part of accountability concerns for educational testers.

From the accountability perspective, the impacts of a test are synonymous with the meaningfulness and usefulness of test scores (Fulcher & Davidson, 2007; Messick, 1995). Such an educational measurement view of accountability is associated with the tenability of the interpretation and use of a test with regard to its impacts on test-takers as well as all other stakeholders of the test and adopts a top-down view toward accountability. From this perspective, only test developers and policy-makers are held accountable for the negative consequences of a test, that is, those who *effect* the test instrument and policy (Macqueen et al., 2018). In contrast, from the perspective of the Global Education Reform Movement (GERM) which uses standardized test instruments to implement educational policy (Chalhoub-Deville, 2016; Sahlberg, 2015), accountability is a unidirectional concept in the sense that teachers and schools are held accountable to governments and the population of test-takers through standardized test results. In other words, reform-targeted testing adopts a downward view toward accountability in such a way that those held accountable for the negative consequences of a test are those who are affected by the test-policy, i.e., schools, teachers, and even test-takers and their parents (Macqueen et al., 2018).

To adopt either one of the two perspectives of accountability entails an adequate understanding of the kinds and nature of impacts of the high-stakes tests. In the Iranian general education context, the Iranian National University Entrance Exam (INUEE) is a high-stakes standard test administered annually on a nationwide scale to screen and admit high school graduates to higher education programs and universities. Given the highly significant stakes involved for all stake holders including the test takers, the parents, the school teachers, the school principals, etc., INUEE has had wide-ranging types of impacts on different layers of general education in particular and Iranian society in general; however, such impacts are left yet to be adequately documented and explored. As a partial attempt in this regard, the present study aimed at a look into the impacts of INUEE from school teachers' and principals' perspectives.

## 2. Review of the Literature

With regard to standardized high-stakes tests, there is a clear consensus in the literature that the implementation of such tests and test-preparation policies has had unintended undesirable consequences for curriculum, assessment, and pedagogical practices (Lewis &

Hardy, 2015; Polesel et al., 2012; Thompson & Harbaugh, 2013). Potentially, such 'teach-to-the-test' practices are quite far from the ones that are considered to be optimal for learners (Polesel et al., 2012; Swain, 2014) and are in contrast with optimum practices in ideal learning environments (Pendergast & Bahr, 2005). Critics of high-stakes testing also argue that such tests can have damaging consequences for the educative process as well (Bracey 2003; Segall, 2003). They believe that high-stakes tests prevent teachers from 'thinking outside the box' and diminish their ability to employ effective instructional techniques in the classroom. They also argue that high-stakes testing reduces the education process to 'teaching to the test' rather than providing students with a critical education which is highly required in today's society. There are also some pieces of evidence in the literature indicating that there are unintended consequences of high-stakes tests resulting in negative effects on learning, curriculum, pedagogy, student well-being, and school enrolments (Booher-Jennings, 2008; Jones et al., 2003). In addition, while some researchers believe that high-stake testing has resulted in gains in academic achievement, research evidence suggests that these gains are artificial and are not necessarily signs of higher achievement. In fact, researchers (e.g., Amrein & Berliner, 2002; Koretz et al., 1991) found that even significant improvements in the results of high-stakes tests do not necessarily transfer to other tests. The research findings also suggest that these gains in achievement might be the result of 'teaching to the test' (Nichols, 2007). In addition, the results of Klein et al.'s (2006) study with teachers at 20 schools also showed that high-stakes testing caused teachers to engage in test-oriented activities. In a similar vein, Pedulla et al. (2003) reported that thanks to high-stakes testing, teachers spent less time on enriching activities such as excursions. In another study, Musoleno and White (2010) showed that after high-stakes testing was implemented, teachers started to decrease their use of teaching practices such as collaboration and questioning. Likewise, Cranley's (2018) revealed that the preoccupation with high-stakes testing did not allow teachers to consider individual differences and to pay sufficient attention to the teaching of values because of their anxiety to cover the content in time and to solve more sample tests. Similarly, a study by Scot et al. (2008) showed that high-stakes testing prevented individual differences from being taken into account.

Interestingly however, Li and Xiong (2018) showed that the time invested on test preparation in class negatively impacted students' performance in high-stakes testing. Additionally, based on 49 qualitative studies, Au (2007) showed that the main impact of high-stakes testing was basing the teaching on test-oriented activities and the teachers' being more willing to adopt teacher-centered teaching. In a study by Zhao et al. (2016), it was shown that high-stakes testing had a negative impact on the learning and teaching process in such a way that it made students passive learners and memorizers of information. Investigating the impacts of high-stakes testing on students, Ashadi and Rice (2016) revealed that high-stakes testing increased students' stress and anxiety and decreased their intrinsic motivation and self-oriented learning. Similarly, Thompson (2013) found that high-stakes testing increased students' levels of stress, anxiety, and the pressure they felt upon them. A number of studies have also shown that high-stakes testing is a source of pressure and anxiety on teachers (e.g., Abrams, 2004; Buyruk, 2014; Gündoğdu et al., 2010; Looney, 2009).

Thus, given that high-stakes testing would give rise to inauthentic learning, scholars voice serious concerns over the negative and detrimental effects that it could have on schools, students,

teachers, and the curriculum (Haney, 2000; Klein et al., 2000; McNeil, 2000). Furthermore, teachers, administrators, and parents have all voiced concerns regarding the stress and anxiety involved in high-stakes testing (Amrein & Berliner, 2003; Barksdale & Thomas, 2000; Landry, 2006). In a study by Jones (2008), teachers stated that high-stakes testing has dampened their teaching morale and that they experience anxiety, pressure, guilt, and even embarrassment at times. According to Landry (2006), some teachers experienced such a high level of stress that they felt a “silent surrender” and were abandoning the field of education. That is, they felt they had no voice and no choice but to implement the strategies and curriculums imposed on them by the administration.

Despite the lack of evidence supporting the use of standardized tests to determine the effectiveness of the education system (Booher-Jennings, 2008; Lewis & Hardy, 2015; Polesel et al., 2012; Thompson & Harbaugh, 2013), high-stakes testing is still used as a gate keeper and school-ranking tool in most public schools around the world. The increasing pressure placed on teachers and schools to improve students' performances on high-stakes testing has given rise to the implementation of test-preparation practices in classrooms which mainly force the teachers to 'teach-to-the test' that is to implement instructional practices only to help students do well on the tests, with no attention to authentic learning of the subject matter (Firestone et al., 2004). As Firestone et al. (2004) rightly put it, this decontextualized test preparation is loosely associated with the curriculum and is mainly focused on the test.

It also appears that the implementation of high-stakes testing negatively affects schools' instructional leadership (Oliveras-Ortiz, 2015). Despite the fact that proponents of instructional leadership are of the opinion that principals must “free themselves from bureaucratic tasks and focus their efforts on improving teaching and learning processes” (Jenkins, 2009b, p. 37), too much emphasis on test-preparation practices might have an opposing effect on principals, too. Although research has shown that principals can exert a positive influence on students' learning and achievement (Coelli & Green, 2012; Seashore Louis, et al., 2010), it is still unclear what kinds of pressure might affect principals' leadership and deviate them from moving toward important educational goals (Oliveras-Ortiz, 2015).

In the Iranian general education context, a number of studies have also explored the impact of INUEE, as a high-stakes test, on teachers. Ghorbani (2008), for instance, explored the nature and scope of the impacts of INUEE on high school English teachers and found that, regardless of their experience, educational background, and gender, the teachers agreed that INUEE had negative effects on their curricular planning and instruction. Salehi and Yunus (2012) also explored high school English teachers' perceptions toward INUEE and reported negative perceptions of the participating teachers toward INUEE. Mahmoudi and Abu Bakar (2013) explored the perceptions of six Iranian pre-university English teachers about the impacts of INUEE on teachers and reported that teachers' opinions included a mixture of positive and negative opinions. Abbasian and Moghimeslam (2013) investigated the views of adult candidates preparing for MA courses and their teachers toward the MA test, which is considered to be a high-stakes test. The results of their study revealed that the teachers were more affected by its washback effects than the students. Additionally, they found that both groups received various effects as revealed by various statistical analyses run on the data. In another study, Abbasian and Nassirian (2015) evaluated the usefulness of INUEE based on Bachman and Palmer's (1996)

six-faceted usefulness model accommodating reliability, validity, impact, interactiveness, authenticity, and practicality. They found that both university professors and EFL freshman students evaluated INUEE as less reliable, less practical, and imposing negative impacts, but they had positive views about its validity, authenticity, and interactiveness. In addition, Ajideh and Mahmoudi (2017) investigated the washback effect of the English section of INUEE and concluded that the students' perceptions toward INUEE were a mixture of both positive and negative ones. However, in this context, the impact of INUEE on school principals and leadership seems to be left understudied. Finally, Estaji and Ghiasvand (2021), inspected the washback effect of the IELTS test on Iranian EFL teachers' instructional planning considering their IELTS-related experiences. Through two sets of questionnaires, they collected data from 120 Iranian IELTS instructors. To supplement their data, they also carried out a semi-structured interview with 15 of the instructors. The findings showed that the IELTS test made the instructors develop exam-oriented plans by focusing on the students' test performance.

### *2.1. Purpose of the study*

As the brief literature review indicates, the investigation of the opinions of different groups of stake-holders has not been ample and adequate in number and strength. In addition, the typology of the INUEE impacts on high school students and their families have all remained understudied. On this basis, the purpose of the main project a part of which is reported in this paper was to explore Iranian INUEE test takers, their parents, high school teachers, and principals' attitudes about different educational, social, and individual impacts of INUEE; however, due to space limitations, the current study reports only the results obtained from high school teachers and principals. Test takers and their parents' attitudes are reported elsewhere. Thus, following a qualitative approach, this study aimed to take a closer look into the impacts of high-stakes testing from the high school teachers' and principals' perspectives and for this purpose the following research questions were raised:

RQ1: What are Iranian high school teachers' attitudes about the possible impacts of INUEE on different stakeholders?

RQ2: What are Iranian high school principals' attitudes about the possible impacts of INUEE?

## **3. Method**

### *3.1. Design of the Study*

The study was carried out by conducting a series of semi-structured interviews to probe into teachers' and principals' opinions about the possible impacts of INUEE. The design of the study was thus exploratory in nature. The interview participants were sampled from three western provinces of Iran. The adopted sampling procedure was a convenience nonprobability sampling procedure.

### *3.2. Participants*

A total of 45 teachers and principals were recruited to participate in semi-structured interviews. The participants were selected from three western provinces of Iran, i.e., Hamedan, Kermanshah, and Kurdistan, based on convenience sampling, in a way that the first three of the

most populated cities from each province were selected. Then, 2 principals and 3 teachers were selected from each city, yielding a total number of 27 teachers (14 males and 13 females) and 18 principals (9 males and 9 females). The teachers' and principals' years of experience ranged from 5 to 30 years (Mean = 16.82, SD = 9.44). Of 27 teachers, 19 reported to have had at least 7 years of first-hand teaching experience in preparing high school students for INUEE in private institutes.

### 3.3. Instruments

The instruments applied in the study included two sets of interview questions for the teachers and principals. In line with the main objectives of the study, to elicit the participants' attitudes about the impacts of INUEE, the two sets of questions (Appendices A and B) for interviews with teachers and principals were first adopted from Macqueen et al. (2018), next they were translated into Persian and finally the questions were so modified to be compatible with the Iranian INUEE. Then, two TEFL experts reviewed and judged the accuracy of the translations and the validity of the question items. A number of other questions were also added on the basis of the theoretical aspects of large-scale tests' impacts. Finally, to ensure the validity of the questions, all of them were expert reviewed by two language testing experts as well. The interviews were carried out in face-to-face format and were all held in the participants' first language i.e., Persian. From among the interview questions, the followings are some examples that were applied to the teachers and the principals respectively:

- Does INUEE create any special competition among students in your class? Please explain.
- Does INUEE have any impact on your teaching methodology? Please explain.
- Do you prioritize teaching INUEE materials over non-INUEE materials? Please explain.
- Do you think INUEE has any impact on students' level of motivation from the first year to last year in high school period?
- Does INUEE have any impact on non-INUEE lessons in your school? What about on your school's educational and cultural activities?

### 3.4. Procedure

#### 3.4.1. Ethical Considerations

Permissions for an interview with teachers and principals were obtained first from the offices of Ministry of Education of the districts by completing the request forms, and then from principals and teachers themselves. Being cognizant of the significance of the INUEE for the Iranian general education system, teachers and principals graciously agreed to participate in the study, and their informed consent was hence obtained. The teachers and principals were both informed that their participation was merely on a voluntary basis and that the obtained data would be kept confidential and used for research purposes only.

#### 3.4.2. Data Collection Procedure and Analysis

Face-to-face interviews were carried out with the participants of each group and each interview lasted for around 30 minutes. Moreover, the interviews were audio-recorded and next transcribed. Then, taking the Grounded Theory (Glaser & Strauss, 1967) approach as the basis

of analysis, the transcriptions were subjected to word-by-word content analysis to extract the common patterns and recurring themes. In fact, content analysis was applied to codify the transcribed interview data through an inductive process of microanalysis and frequently moving back and forth through the interview excerpts to extract common patterns and recurring themes of the data. After coding and 'quantitizing' the data (Dörnyei, 2007), the basic themes were identified and their frequency of occurrences was counted and tabulated.

#### 4. Results

##### 4.1. Themes Extraction Process from the Teachers' Interview Data

Table 1 presents the six steps that were taken for the extraction of themes from the teachers' interview data.

Table 1

*The Process of the Extraction of Themes for Interviews with Teachers*

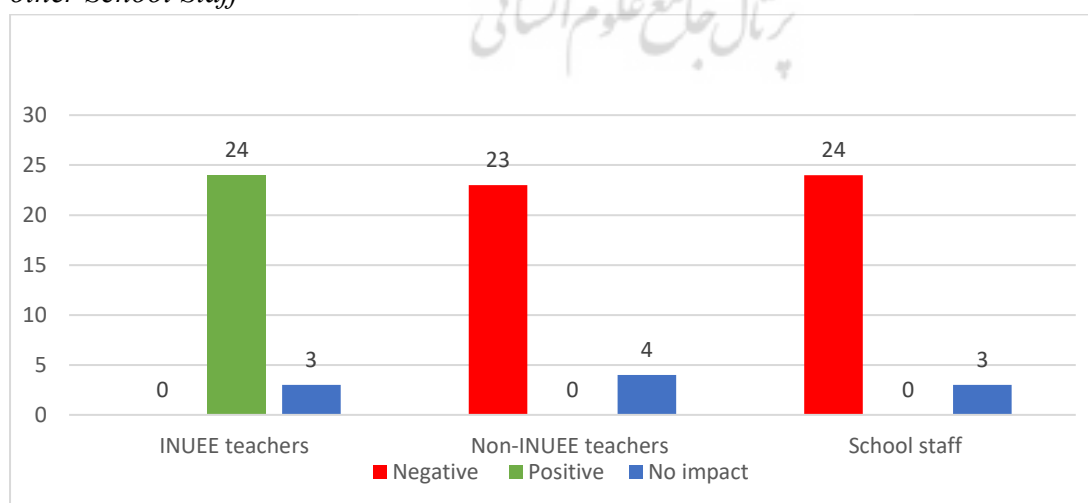
No.	Stages
1	Transcribing the data
2	Sorting the data
3	Initial coding
4	Second-level coding
5	Using a template of codes
6	Growing ideas and themes

##### 4.1.1. Teacher's Interview Results

The first question teachers were asked was in particular related to the impacts of INUEE on students' relationships with teachers and other school staff. The obtained results are summarized in Figure 1.

Figure 1

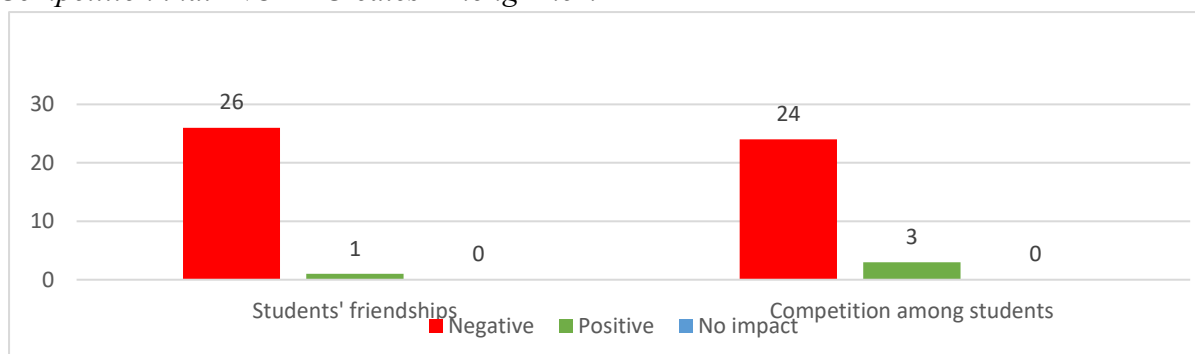
*Teachers' Opinions about the Impact of INUEE on Students' Relationships with Teachers and other School Staff*



As demonstrated in Figure 1, 24 teachers (88.88%) argued that INUEE has positive impacts on students' relationships with INUEE teachers only. On the other hand, 23 (85.18%) believed that it has negative impacts on students' relationships with non-INUEE teachers and 4 (14.81%) expressed that it has no impact on student-non-INUEE teacher relationships. The majority of teachers stated that most students love teachers who teach INUEE courses like biology, chemistry, mathematics, etc., and they do not have good relationships with teachers of non-INUEE courses like history, geography, media literacy, etc. In addition, most teachers mentioned that since INUEE teachers 'teach-to-the test', this practice positively affects students' relationships with them. On the other hand, as non-INUEE teachers just teach the regular syllabus their relationship with students is negatively affected, and even at times it is quite tense. As one of the teachers mentioned, *"Students always pester me to teach to the test. When I don't, they strongly object. Actually, students hate a teacher who doesn't teach to the test, and even do not like to attend her class."* Another teacher said, *"If a student gets a low score from an INUEE teacher, the teacher-student relationship will be seriously threatened"*. Also, most teachers, especially non-INUEE ones, referred to the detrimental impacts of INUEE non-profit preparation institutes on teacher-student relationships. They believed that such institutes "poison students' minds" and challenge school teachers' skills and abilities for preparing test takers for INUEE with the intention of absorbing more students for their own benefit. Besides, 24 teachers (88.88%) expressed that INUEE had negative impacts on students' relationships with school staff. Among the teachers who believed that INUEE had negative impacts on students' relationships with school staff, most of them believed that since students have got high expectations from everyone in school for holding INUEE classes, if their expectations are not met, they will object, and this will negatively affect their relationship with even school staff. One of the teachers said, *"Students have high INUEE expectations from even school staff and if their expectations are not met, they would object."* Another teacher mentioned, *"The psychological burden of INUEE makes students show disruptive and antisocial behaviors toward school staff at times that violate school regulations"*.

Teachers were also asked about the impacts of INUEE on students' friendships and the nature of the competition that INUEE creates among the students. Figure 2 summarizes the results obtained for this interview question.

Figure 2  
*Teachers' Opinions about the Impact of INUEE on Students' Friendships and the Nature of Competition that INUEE Creates Among Them*

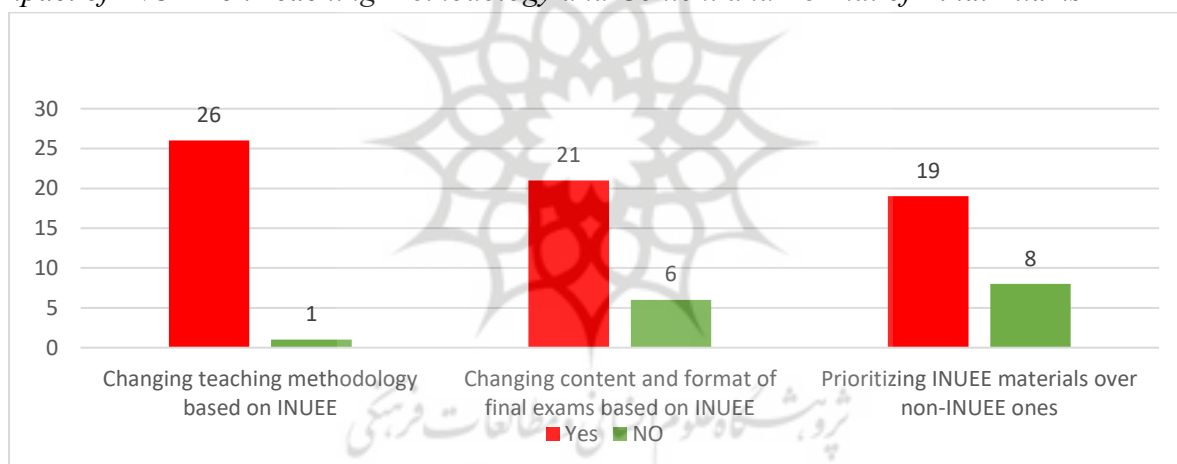




As is indicated in Figure 2, 26 teachers (96.29%) stated that INUEE has negative impacts on students' friendships. One of the teachers pointed out that, *"INUEE instigates a sense of envy among students that negatively affects their friendships."* Also, 24 teachers (88.88%) stated that INUEE creates negative and unhealthy competition among the students. The majority of teachers believed that INUEE creates an atmosphere of hostility among most students. Moreover, the unhealthy competition that INUEE induces among students was said to be featured with secrecy, jealousy, and lying to each other. It was said to create an underground competition in which students tend to hide their study hours, the INUEE classes they take, the name of INUEE teachers they take classes with, and the number of mock exams they take. *"Students cover their INUEE textbooks so that INUEE sources they take are not unintentionally disclosed to their classmates"*, as one of the teachers expressed.

The teachers were asked about the impact of INUEE on their teaching methodology, the content and format of their final exams, and whether they prioritized INUEE related materials over non-INUEE materials. The results obtained from these questions are summarized in Figure 3.

Figure 3  
*Impact of INUEE on Teaching Methodology and Content and Format of Final Exams*



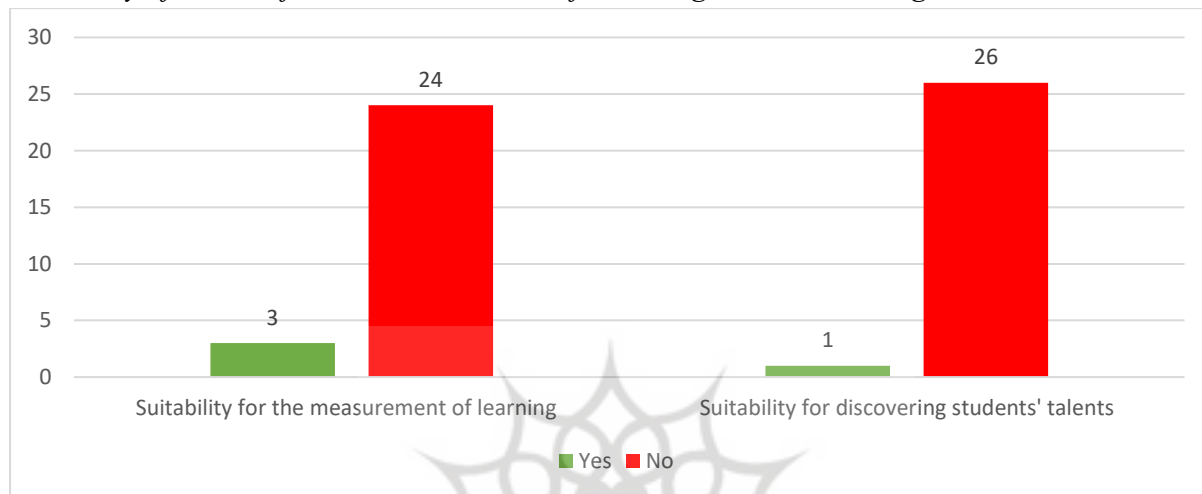
As shown in Figure 3, 26 teachers (96.29%) declared that they alter their teaching methodology in accordance with INUEE. Also, 21 teachers (77.77%) declared that they design and develop their final exams with an eye to INUEE format and content. Finally, 19 teachers (70.37%) stated that they prioritize INUEE relevant materials over non-INUEE materials. Among the teachers who stated that they change their teaching methodology and the content and format of their final exams in accordance with INUEE, most of them stated that they had to do so as a result of the pressure of students and their families. In addition, the majority of teachers expressed that if they don't teach to the test, they will be labeled 'stuck-in-the-mud teachers' by most students and they will be marginalized. One of the teachers said, *"Unfortunately, contrary to our wills, we are obliged to teach to the test because students and parents want us to step into this indirect route."* Some of them also stated that they alter their teaching methodology in accordance with INUEE because they consider it a revenue-generating activity. That is, by teaching the tips and tricks of INUEE in classes, they would be

known as veteran INUEE teachers and they could consequently make more money in INUEE private institutes.

Teachers were also asked about whether INUEE is a good yardstick for the measurement of the learning process and discovering students' talents. The teachers' responses are graphically summarized in Figure 4 below.

Figure 4

*Suitability of INUEE for the Measurement of Learning and Discovering Students' Talents*



As indicated in Figure 4, 24 teachers (88.88%) devalued INUEE as a measure of test takers' learning outcomes. They mostly believed that a single four-hour multiple-choice test could not properly measure the test takers' learning outcomes. They maintained that the multiple-choice format of INUEE led to the test takers' formulaic and rote memorization of information. Further, students trained with different test-taking strategies were accordingly unfairly privileged. One of the teachers in particular mentioned, *“One cannot measure a 12-year learning process in a matter of four or five hours.”* In addition, 26 teachers (96.29%) maintained that INUEE was not a good measure for the identification of the test takers' talents. As one of the teachers stated, *“Students' talents are not only defined by their math scores or their physics scores; talent is multi-dimensional. A student might be talented in a lesson or an activity which is not part of INUEE. Such talent might remain dormant forever”*.

Furthermore, teachers were asked to express their opinions about the impacts of INUEE on students' morale. The obtained results revealed that out of 27 teachers interviewed, 25 (92.59%) stated that INUEE had negative impacts on their students' morale. All of the teachers who expressed that INUEE had negative impacts on students' morale referred to anxiety and stress as the most important negative impact of INUEE on students' morale. *“The stress of INUEE is a paralyzing one; it even infects students' family members”*, as one of the teachers pointed out. Most of them also referred to other impacts such as demotivation, frustration, depression, impatience, and preoccupation with learning multiple-choice test-taking skills rather than real, authentic learning. One of the teachers stated that *“INUEE has such a strong negative impact on students' morale that some of them even see psychologists and psychiatrists”*.

Teachers were also asked about the impacts of INUEE on students and their families' economic status. The result showed that all 27 teachers (100%) stated that INUEE had negative and detrimental impacts on students' and their families' economic status. Most teachers believed that the costs associated with INUEE preparation classes, private teachers, textbooks, CDs, and other supplementary materials were beyond families' financial power. *"The double whammy of INUEE preparation classes and materials are backbreaking for families and puts them in a financial crisis; they feel compelled to afford such cost because they think their child's future success depends on it; therefore, they move heaven and earth to make money by borrowing, taking out loans, and even selling their houses to be able to afford such costs"*, as one of the teachers pointed out. Some teachers also stated that having to invest in INUEE classes and materials deprives students of the costs associated with their recreational activities like going the gym, pool, and cinema. Some teachers also believed that this was a source of discrimination between financially affluent students and students who were from economically weaker families.

Furthermore, with regard to the impact of INUEE on students' educative and personality development, 25 teachers (92.59%) expressed that INUEE had negative educative and personality impacts on students. The negative impacts that most teachers pointed out was the detrimental effect of INUEE on students' social etiquettes. For instance, one of the teachers stated that, *"some students are so preoccupied with INUEE that they even forget to greet their teachers; they simply argue with their teachers over scores and disrespect them"*. Another teacher believed that INUEE makes students asocial and even anti-social because they tend to look at everyone as a rival. Some teachers also referred to the negative impact of INUEE on students' moral principles, *"most students don't have the spirit of forgiveness; they grow a spirit of hostility and cruelty as a consequence of INUEE"*, as expressed by one of the teachers. Also, a number of teachers stated that some students are so preoccupied with INUEE that they become unable to manage their emotions and excitements.

Teachers were also asked whether INUEE has had any impacts on their job reputation. The results indicated that 24 teachers (88.88%) believed that INUEE has a strong impact on their job reputation. One of the teachers expressed that, *"when a student gets a high score on INUEE, it spreads like wildfire; everyone asks him/her about their teachers, and those teachers will be known as top teachers and will soon be the talk of the town, this will give our job a high reputation"*. Another teacher argued that, *"when parents want to enroll their children in schools, they ask about their teachers; they would enroll their children in schools the teachers of which have a name for teaching students who have already gotten high scores on INUEE, this will give not only teachers but also the whole schools a high reputation, even schools evaluate their teachers based on their students' success, or its lack thereof, in INUEE"*. As another teacher mentioned, *"students' success in INUEE will not only give teachers a high reputation but its economic benefits will also accrue to them, when a student gets a high score on INUEE, s/he will introduce his teachers to a lot of other students to have private class with."* The other side of the coin is that, as mentioned by most teachers, there are many veteran and knowledgeable teachers who remain marginalized simply because they do not teach to INUEE and comply with the curricular educational objectives in their teaching practice.

Another question teachers were asked was related to the impact of INUEE on students who fail INUEE. 26 teachers (96.29%) argued that INUEE has negative impacts on such

students. Most teachers believed that such students feel seriously discouraged, frustrated, disappointed, and defeated; they lose their self-confidence, morale, and motivation; they become almost depressed and isolated from society, and they even hide themselves from their relatives and acquaintances for a while to avoid hearing the sarcastic remarks that put too much psychological pressure on them and makes them too embarrassed; some of them even suffer nervous breakdowns. Some teachers stated that such students even see a psychologist to be able to get over the shock of their failure. One of the teachers mentioned, “*Students who fail INUEE feel such a strong psychological pressure as if it is the end of the world, and this pressure is by far more serious for students whose friends have been passed INUEE with flying colors.*”

Finally, the teachers were asked to express their general feelings about INUEE. The results showed that 24 (88.88%) teachers had a strongly negative feeling about it. Most of them generally believed that a four-hour single session INUEE is an unfair marathon, and inappropriate for measuring a twelve-year long learning process, a plight for the country's education system. One of the teachers said, “*I have a negative feeling toward INUEE because it spoils students' adolescence and destroys the golden period of their lives. In fact, at a period that is supposed to be the happiest period of their lives, it is the saddest one. I wish they could eliminate INUEE.*”

#### 4.2. Themes Extraction Process from the Principal's Interview Data

As for teacher interviews, a similar list of six steps already displayed in Table 1 was also applied in the process of the extraction of themes from the principals' interview data.

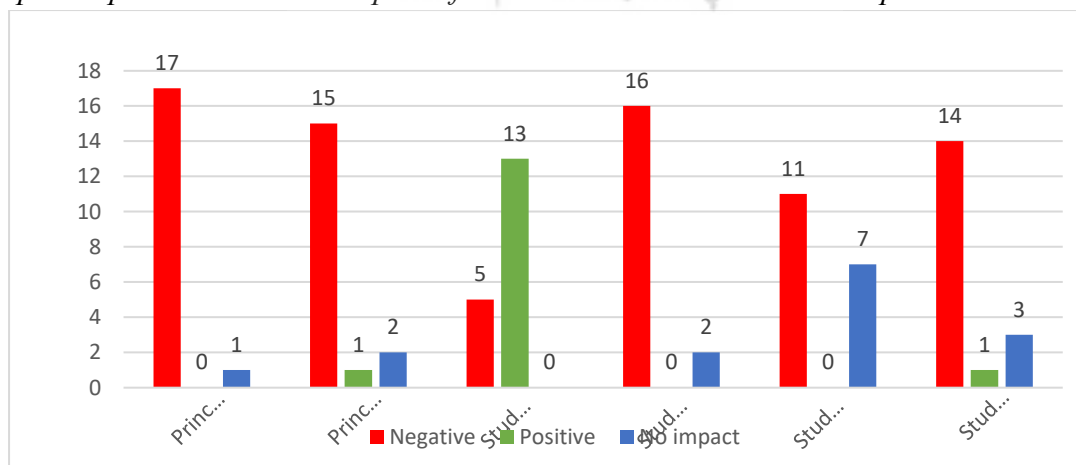
##### 4.2.1 Principals' Interview Results

As for the second research question regarding the school principals' attitudes and opinions about the impacts of INUEE, an in-depth analysis of interview data indicated that, overall, principals had also a negative opinion about INUEE.

The first set of questions principals were asked was about the impact of INUEE on student-principal, principal-parents, student-teacher, student-school staff, and student- family members relationships. The obtained results are displayed in Figure 5 below.

Figure 5

*Principals' Opinions about the Impact of INUEE on Students' Relationships with other People*



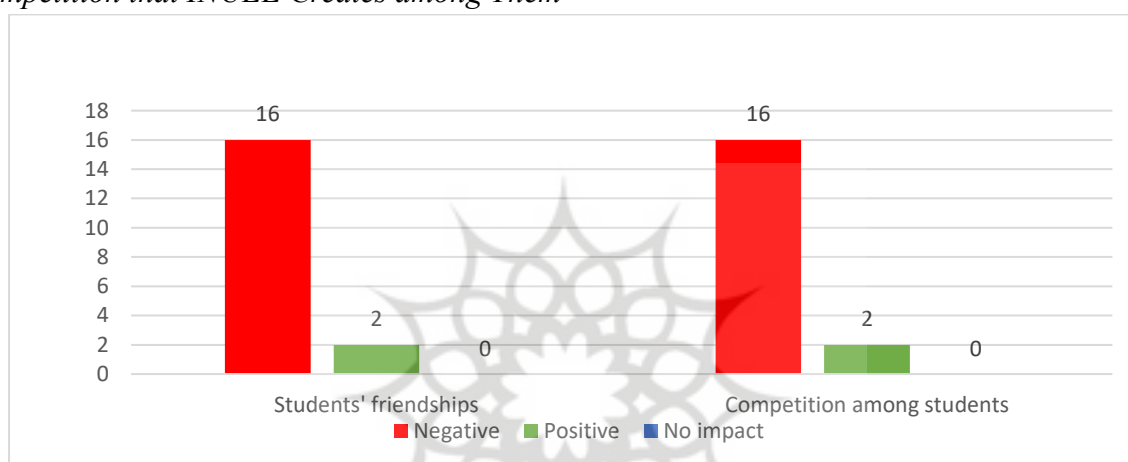
As Figure 5 demonstrates, 17 principals (94.44%) expressed that INUEE has negative impacts on the principal-student relationship. Most principals referred to students' unreasonable expectations concerning the school's INUEE policies on the number of INUEE preparation courses. Moreover, they referred to the students' objection to teachers who do not teach INUEE points as a source of conflict in principal-students relationships. As for the impact of INUEE on the principal-parents relationship, 15 principals (83.33%) believed that INUEE negatively affects their relationship with students' parents. As one of the principals pointed out, *"when students fail to get good results in INUEE mock exams, parents show up; they point their fingers at principals, saying that you have not done your job well"*. With regard to the impact of INUEE on the student-teacher relationship, principals, like teachers, stated that INUEE has different impacts on students' relationships with INUEE and non-INUEE teachers. That is, 13 principals (72.22%) expressed that INUEE has positive impacts on the student-INUEE teacher relationship, and 5 (27.77%) principals argued that it has negative impacts on the relationship between students and INUEE teachers. On the other hand, 16 principals (88.88%) stated that INUEE has negative impacts on the relationship between students and non-INUEE teachers. Most principals, like teachers, argued that students love INUEE teachers and the teachers who teach them INUEE test-taking strategies, but they do not have good relationships with, and even hate, teachers who do not teach to INUEE and strongly object to their teaching methods. *One of the principals suggested, "Students over expect their teachers as far as INUEE is concerned. They pester their teachers to give them INUEE information that is beyond their responsibilities. If teachers do not fulfill their expectations, students will object."* Regarding the impact of INUEE on the relationship between students and school staff, 11 principals (61.11%) stated that INUEE has negative impacts on this relationship and 7 (38.88%) declared that it has no impact. Most principals stated that the negative relationship between students and school staff as a consequence of INUEE has its roots in students' unreasonable INUEE expectations from school staff, and when those expectations are not met, the relationships are negatively affected. Finally, with regard to the impact of INUEE on the relationship between students and their family members, 14 principals (77.77%) stated that INUEE negatively affects students' relationships with their family members. Some principals pointed to parents' high expectations from their children regarding their performance on INUEE that are beyond their abilities, which creates tension between students and their parents. On the other hand, according to most principals, students' unreasonable expectations from their parents for financial support to enroll in INUEE preparatory classes and buying INUEE materials strain relations between students and their parents.

Furthermore, the principals were asked about the impact of INUEE on students' friendships and the nature of the competition that INUEE induces among them. As is demonstrated in Figure 6, 16 principals (88.88%) expressed that INUEE has negative impacts on students' friendly relationships and only 2 (11.11%) expressed that INUEE has positive impacts. One of the principals said, *"INUEE creates a sense of envy among students which makes them behave unfriendly with each other. It also makes them lie to each other at times."* Concerning the nature of competition that INUEE creates among students, 16 (88.88%) principals stated that INUEE creates unhealthy and negative competition among them. The majority of principals referred to the same negative impacts expressed by teachers such as the

creation of an atmosphere of hostility among most students; the unhealthy and underground competition which is polluted with secrecy, jealousy, lying to their friends and hiding their resources from their friends as consequences of INUEE. In addition, a number of principals referred to disorder in schools created as a consequence of competition among students. One of the principals mentioned that *"the number of students' absences dramatically increases specifically for non-INUEE courses; on the one hand, we are repeatedly emphasized by the Ministry of Education authorities that all students must attend classes until the last day of the academic year; the situation gets really tough and out of our control"*.

Figure 6

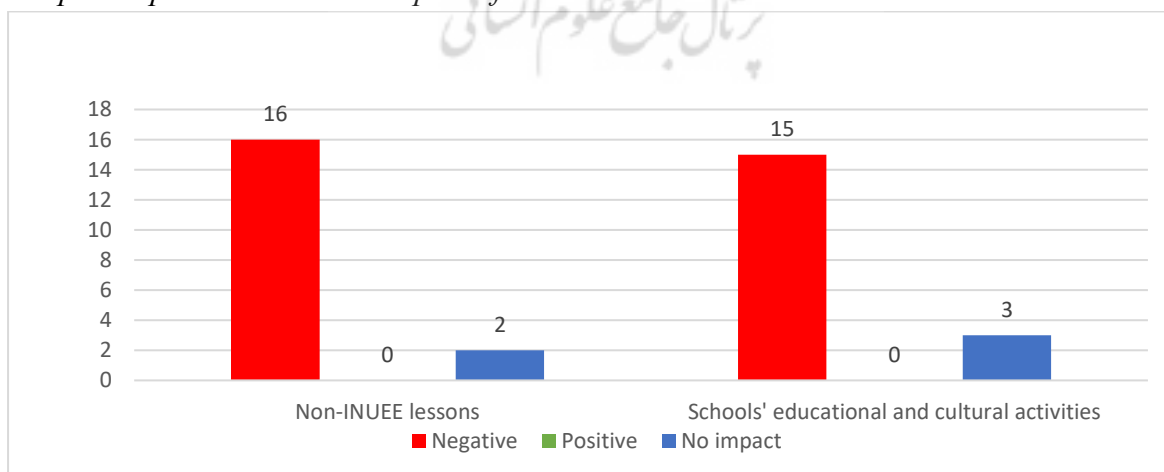
*Principals' Opinions about the Impact of INUEE on Students' Friendships and the Nature of Competition that INUEE Creates among Them*



Another set of questions principals were asked was related to their opinions about the impact of INUEE on non-INUEE courses and extracurricular activities. The results obtained from the analysis of principals' opinions are summarized in Figure 7.

Figure 7

*Principals' Opinions about the Impact of INUEE on Non-INUEE Lessons and Activities*

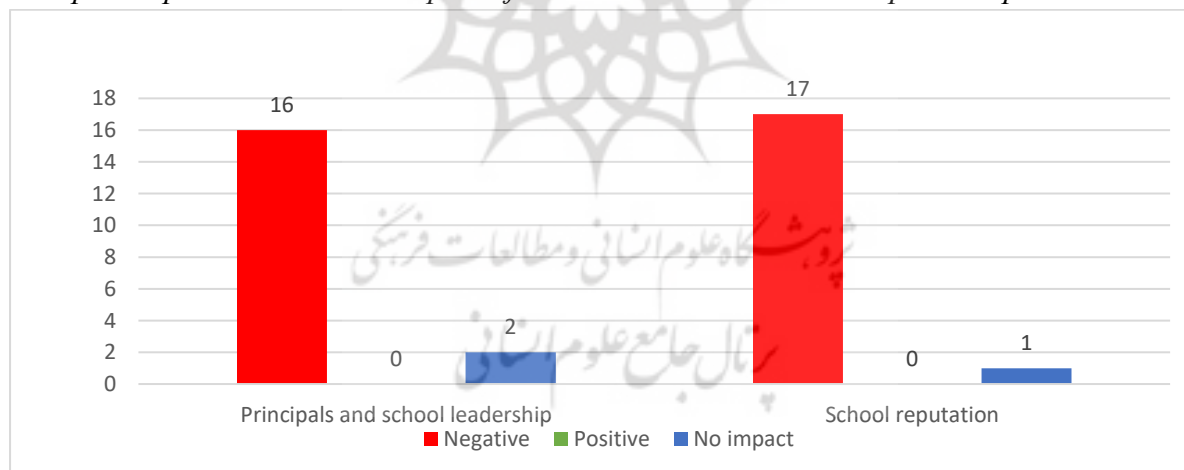


As to the impact of INUEE on non-INUEE courses, 16 principals (88.88%) expressed that it has negative impacts on such courses. Furthermore, with regard to the impact of INUEE on educational and cultural activities, 15 (83.33%) of them stated that such activities are also negatively affected. According to most principals, students don't take non-INUEE courses seriously and hence such lessons are marginalized. They complained that non-INUEE courses like Media Literacy, The Environment, Family Hygiene, Social Identity, History, etc. that are of great educational importance are sacrificed. One principal mentioned that, *"because students and their families have false standards for judging school success based on INUEE, we have to assign less importance to non-INUEE courses and put more emphasis on INUEE courses instead"*. Another principal expressed that, *"although we emphasize the importance of non-INUEE lessons, most students don't like them, even if they study them and attend their classes, it is just because of the fear of failing; they just attend their classes to get a passing score"*. As for the impact of INUEE on schools' educational and cultural activities, most principals also stated that students do not like to participate in such activities. As one of the principals mentioned, *"when students are requested to participate in educational and cultural activities, they strongly object and say such activities are not useful for them, or that they don't have time for such activities; instead, they suggest holding INUEE preparatory class "*.

The principals were also asked about the impact of INUEE on school leadership and school reputation. The obtained results are summarized in Figure 8.

Figure 8

*Principals' Opinions about the Impact of INUEE on School Leadership and Reputation*

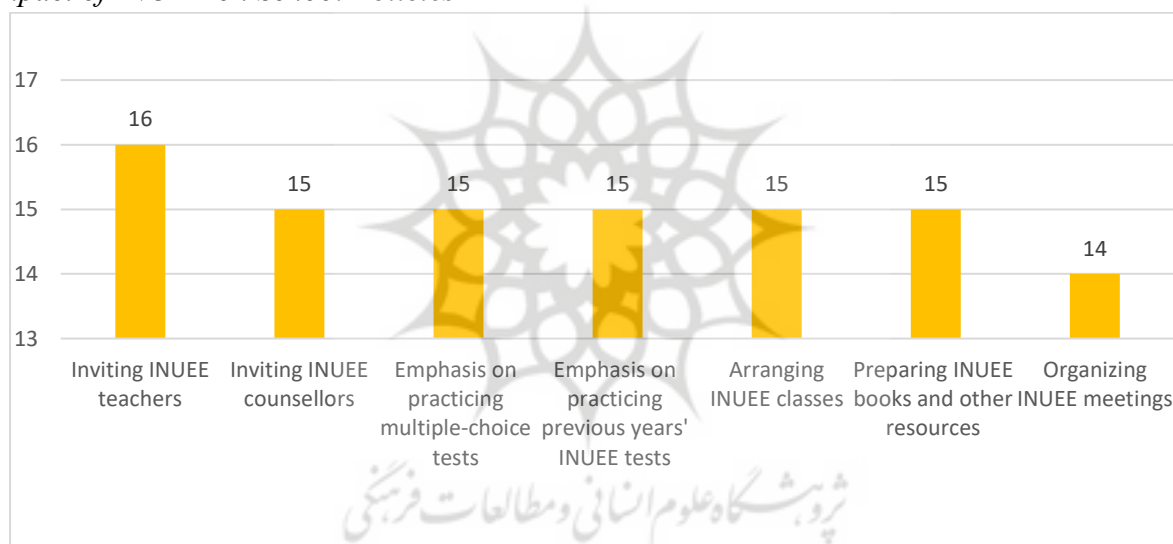


A great majority of principals (88.88%) expressed that INUEE had negative impacts on their school leadership and policies. Similarly, a large number of them expressed that INUEE policies interfere with their annual timetable, take a lot of their time, put them in dilemmas, and thus make leadership difficult for them. They maintained that striking a balance between students' and parents' INUEE expectations and the educational policies makes their leadership even tougher. They also believed that having to implement INUEE policies in their schools has hindered them from achieving educational goals and preparing them for their future social and personal functions. One of the principals, in particular, suggested, *"Even if we are against INUEE, it is like a river that takes us with itself and we cannot swim in the opposite direction."*

*We emphasize our colleagues to teach to the test and we invite INUEE counselors to give students the tips and tricks of the trade.*” In addition, 17 principals (94.44%) expressed that students' success at INUEE had a direct relationship with their school's reputation. The principals believed that students' success, or its lack thereof, has a profound impact on school reputation and that students' performance on INUEE is used as a school-ranking tool by students and their parents. One of the principals argued that, *“when parents want to enroll their children in a school, they look for schools which have had higher numbers of students with good INUEE scores;... even the Ministry of Education has a high opinion of schools which have had more students with high scores on INUEE”*. Another principal stated that, *“students' success or failure in INUEE has such a major impact on school reputation that it even determines our existence”*.

In addition, principals were asked to specifically mention what INUEE related policies and programs they implement in their schools during the academic year. The obtained results are summarized in Figure 9.

Figure 9  
*Impact of INUEE on School Policies*



As indicated in Figure 9, 16 principals (88.88%) stated that they invite and hire famous INUEE teachers. 15 of them (83.33%) expressed that they invite INUEE counselors, request their teachers to practice multiple-choice tests to make the students more test-wise, ask their teachers to practice previous years' INUEE tests, arrange INUEE preparation classes, and prepare INUEE books and other resources. Also, 14 principals (77.77%) argued that they organize meetings focusing on INUEE.

The principals were asked about the impacts of INUEE on students' morale and motivation. Out of 18 principals interviewed, 17 (94.44%) declared that it has negative impacts on students' morale and 14 principals (77.77%) believed in its negative impacts on students' motivation while only 4 (22.22%) of them argued that it has positive impacts.

With regard to the impact of INUEE on students' morale, principals referred to negative impacts such as stress and anxiety, aggression, depression, exhaustion and frustration, and negative impacts on students' politeness. One of the principals stated that *“most students crack*



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*up as they approach the end of high school period; you can see exhaustion, frustration, depression, and disappointment on their faces".*

Also, 17 principals (94.44%) stated that INUEE has negative impacts on students who fail it. Most principals, similar to the teachers, referred to negative impacts including feelings of discouragement, disappointment, defeat, depression, low self-confidence, embarrassment, isolation, nervous breakdowns, and confusion.

Concerning the impact of INUEE on students and their families' economic status, all 18 principals (100%) stated that INUEE has negative impacts on their economic status. A majority of principals pointed to multimillion costs associated with INUEE preparation classes, textbooks, and other supplementary materials which put too much financial pressure on families. They contended that most families have to cut budgets associated with their food and clothing, and recreational activities, and take out loans or even sell their houses to be able to afford INUEE costs.

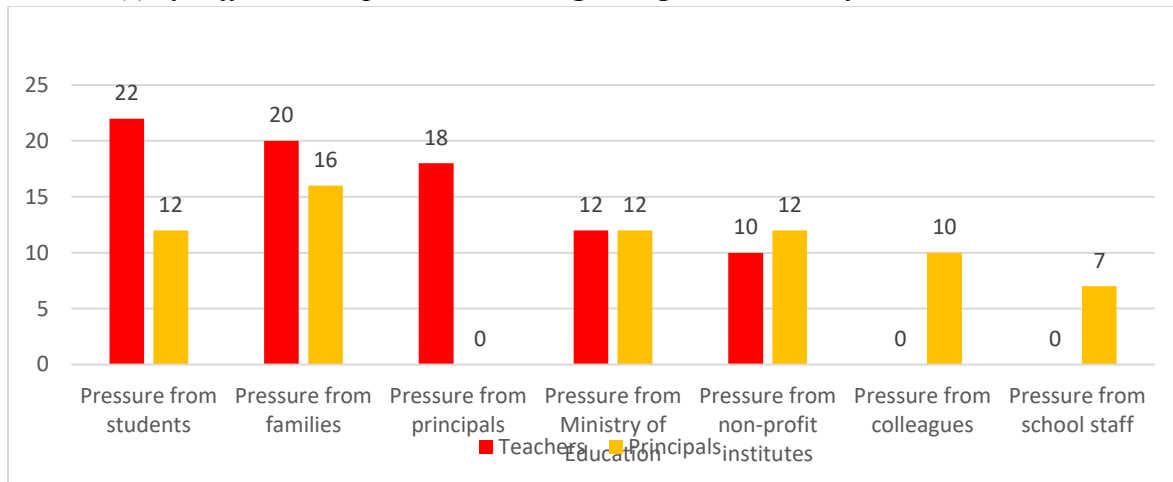
Seventeen principals (94.44%) declared that INUEE had negative impacts on students' personalities as well. They referred to negative impacts on students' social etiquettes, social behaviors, and moral principles and attributed such negative impacts to the high level of stress that the students experience, which affects all aspects of their lives.

Finally, principals were asked to express their feelings about INUEE. The analyses showed that 16 principals (88.88%) had negative feelings about INUEE. A majority of them likened it to a plight, an obstacle, a monster, and an unfair and unequal war.

Other questions both teachers and principals were asked were associated with the pressure(s) (if any) they felt from other people or institutes regarding students' performance in INUEE, if they felt any discrimination as a result of INUEE, and if they had any suggestion(s) for change in INUEE. As is shown in Figure 10, 22 teachers (81.48%) and 12 (66.66%) principals stated that they were under the pressure of students, 20 teachers (74.07%) and 16 principals (88.88%) expressed that they were under the pressure of students' families, 18 teachers (66.66%) argued that they were under the pressure of the school principals, 12 teachers (44.44%) and 12 principals (66.66%) declared that they were under the pressure of Ministry of education, 10 teachers (37.03%) and 12 principals (66.66%) stated that they were under the pressure of INUEE preparation non-profit institutes, 10 principals (55.55%) expressed that they were under the pressure of their colleagues and 7 principals (38.88%) declared that they were under the pressure of their school staff.

Figure 10

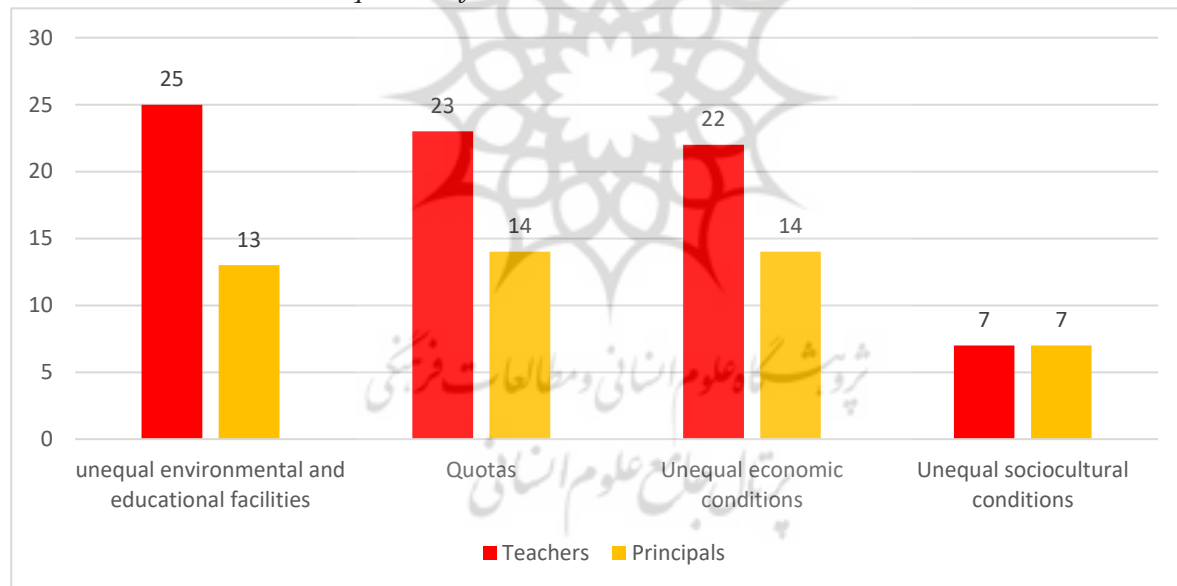
*Pressure(s) of Different People/Institutes Regarding Students' Performance in INUEE*



Besides, teachers and principals were asked if any discrimination occurs as a consequence of INUEE, the results of which are summarized in Figure 11.

Figure 11

*Discrimination as a Consequence of INUEE*

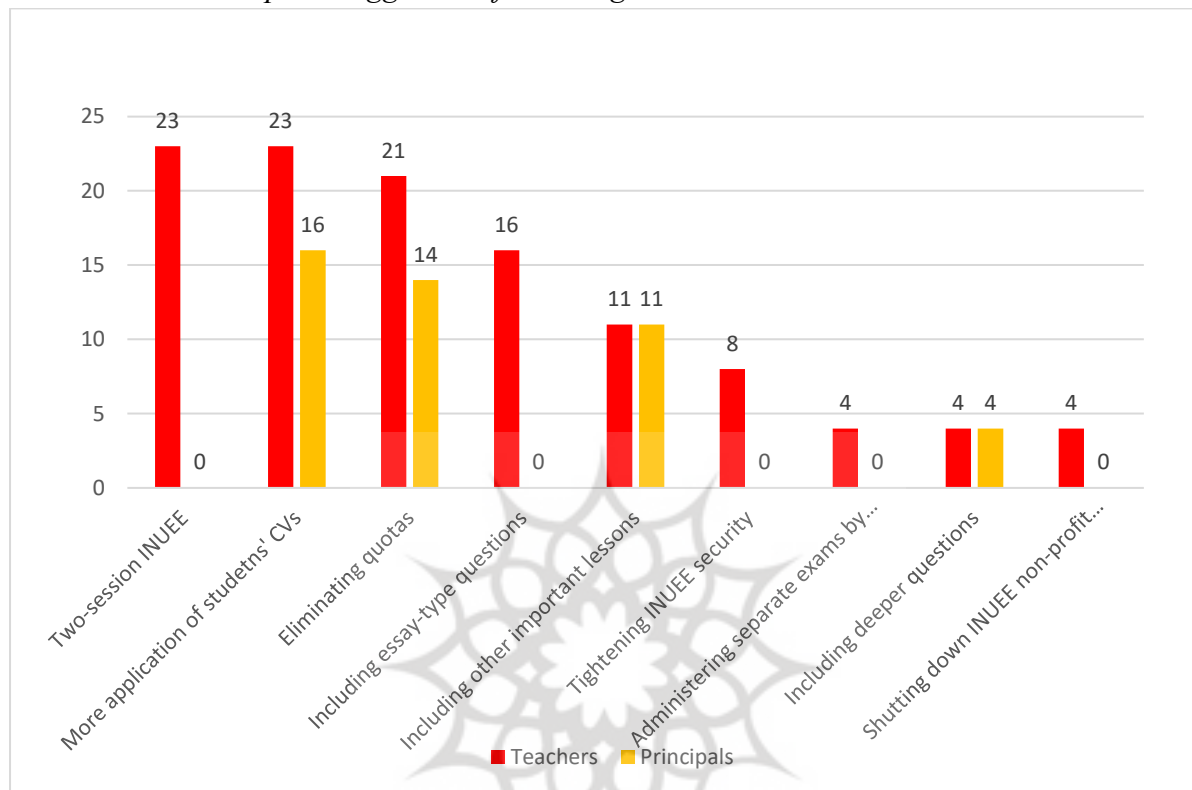


As demonstrated in Figure 11, 25 teachers (92.59%) and 13 principals (72.22%) referred to unequal environmental and educational facilities, 23 teachers (85.18%) and 14 principals (77.77%) stated that INUEE quotas were discriminatory and unfair, 22 teachers (81.48%) and 14 principals (77.77%) referred to economic discrimination, indicating that students in lower- and middle-class families were being discriminated against as a result of not having sufficient financial resources to enroll in INUEE preparation classes and buying INUEE preparation books.

Finally, teachers and principals were asked if they had any suggestion(s) for change in INUEE. The results indicate that the majority of the participants believed that a single session

four-hour test for measuring a 12-year learning process was unprofessional and unfair. The participants' suggestions are summarized in Figure 12.

Figure 12  
*Teachers' and Principals' Suggestions for Change in INUEE*



As Figure 12 indicates, 23 teachers (85.18%) suggested that it was better for INUEE to be held in at least two separate test sessions. Also, 23 (85.18%) teachers and 16 (88.88%) principals called for more application of students' educational records on students' INUEE scores. In addition, 21 teachers (77.77%) and 14 principals (77.77%) suggested the INUEE quotas are better be eliminated as they strongly believed that applying quotas to students' INUEE scores was unfair. Furthermore, 16 teachers (59.25%) suggested essay-type items to be included in INUEE. 11 teachers (40.74%) and 11 principals (61.11%) suggested including courses like history, geography, media literacy, family management, etc. in INUEE. The other less frequent suggestions are also displayed in the figure above.

## 5. Discussion

The purpose of this study was to explore Iranian high school teachers' and principals' opinions about the different educational and social impacts of INUEE on different stakeholders. The analyses indicated that the majority of the interviewees had negative ideas about INUEE. From most participants' vantage points, INUEE has negative impacts on curriculum and pedagogy, school leadership, school and teachers' reputation, students and their families' economic status, their relationships with students and their parents, and also on students' relationships and friendships with others. The participants also voiced concern about the

discrimination as a consequence of INUEE and also the negative educational impacts of INUEE and its lack of fairness as an instrument for measuring students' achievement and learning as well as discovering students' abilities and talents. In addition, the teachers and principals expressed their concerns about the pressures that they feel as a consequence of INUEE, which inevitably give rise to the implementation of test-preparation 'teaching to the test' policies to the detriment of implementing high-quality education emphasizing creative and critical thinking and other important life skills.

These findings align with those that have frequently been reported in the literature on the negative impacts of high-stakes testing (e.g. Au, 2007; Cranley, 2018; Demir & Keles, 2021; Li & Xiong, 2018; Minarechova, 2012; Ramezaney, 2014; Scot et al., 2008). The findings of the study also resonate to some extent with (Rezagah, 2022), regarding the impact of the educational system on teachers' assessment practices. In addition, the findings of the present study are consistent with Farangi and Rashidi (2022), who found that teachers who participated in their study believed that assessment results should be interpreted cautiously as they might be unfair to students or influenced by other irrelevant factors.

With regard to the teachers, the majority of them had negative opinions about INUEE as they believed that INUEE had negatively affected their teaching practice, job reputation, and relationships with students. They also viewed INUEE as a discriminatory, unfair, and inappropriate instrument for measuring students' achievements, abilities, and talents. Some veteran and seasoned non-INUEE teachers complained that they were marginalized and no longer valued by the community for the sole reason that they do not see INUEE as a priority. The majority of the teachers expressed that having to focus on INUEE materials and practicing multiple-choice tests have increased their workloads. This shows that teachers are stuck in a difficult situation of whether to 'teach to the test' or to 'teach the best'. On the one hand, they have to align the curriculum to test-preparation practices and 'teach to the test' because students and their families expect them to be doing so. On the other hand, their professional morale necessitates 'teaching outside the box' and transferring what they think is the best for their students' educational development. However, the reality of the educational system pushes them to do the former because, as the majority of the teachers stated, "it is swimming against the tide to do otherwise". In other words, teachers felt powerless and frustrated to change anything except preparing students for the high-stakes-test. These issues multiply teachers' burden of teaching and might progressively lead to their burnout. Thus, as evidenced above, INUEE has resulted in narrowing the curriculum and deviation of the educational system from its desired agenda, both of which seriously question the usefulness of INUEE as a high-stakes gatekeeping test.

The obtained results also indicated that INUEE negatively affects the school principals and the school leadership. The majority of the principals stated that INUEE has negatively affected their students, school policies, and has thus made school leadership quite a challenge for them. They complained that because of being under the pressure from different sources such as the potential test taking students and their families and to just jump on the bandwagon, they have to implement test-preparation policies in their schools, which interfere with their annual timetables. While, as instructional leaders, principals should serve as coaches to their teachers (Oliveras-Ortiz, 2015) and hold teachers accountable for teaching the curriculum, it is disheartening to see how they themselves fall prey to INUEE and feel disempowered to do their

responsibility. Thus, as expressed by the majority of the principals, INUEE has seriously affected their school policies, their leadership, and extracurricular activities. All attested adverse impacts of the test hence question the consequential validity of INUEE.

Teachers and principals also complained about the violation of educational justice as a consequence of unequal environmental and educational facilities, discriminatory quotas, and students' unequal economic and sociocultural conditions, all of which seriously question the fairness of the test. The discriminatory quotas, in particular, are in stark contrast with Mesick's (1980) call for test fairness which is violated when an individual's group membership determines that s/he achieves significantly differently from the other test takers.

The finding that high-stakes testing has negative impacts on school leadership aligns with the findings of studies like Oliveras-Ortiz (2015), and Wyn, et al. (2014). Wyn et al. (2014) reported that all but one of the 16 principals described the disruption caused to the annual timetable by NAPLAN, a high-stakes tests in Australia, as either 'significant' or 'reasonably significant'.

In addition, the attested negative impact of high-stakes testing on the curriculum and pedagogy is consistent with the findings of studies such as Berliner (2011), Donnelly and Sadler (2009), Polesel et al. (2012), Thompson and Harbaugh (2013) and Wright (2002), who found that high-stakes tests result in narrowing the curriculum. It also supports the findings of Dulfer et al. (2012) and Wyn et al. (2014) who verified that NAPLAN, narrowed curriculum and teacher practice and negatively affected the time spent on quality teaching and learning, imposing unnecessary pressures on schools and teacher workloads.

Moreover, the finding that some important courses are marginalized because they are not included in high-stakes tests is verified in studies like Polesel et al. (2012), Ritt (2016), and Wright (2002). Jones et al. (1999) wrote that "...science, social studies, and the arts are subjects that are pushed aside and taught only if there is extra time left in the schedule," (p. 200).

Concerning the negative educational impacts of INUEE and its unfairness and invalidity as an instrument for measuring students' achievement and learning outcomes as well as discovering students' abilities and talents, studies supporting such negative impacts of high stakes tests are not scarce (e.g., Darling-Hammond, 2007; Hoffman et al., 2001; Moon, et al., 2007; Reichel, 2009; Smith, 1991; Wright, 2002; Wright & Choi, 2006). Hoffman et al. (2001) for example showed that the Texas Assessment of Academic Skills (TAAS) didn't measure what it purported to measure and exerted negative educational impacts. Ritt (2016), also reported that his participants complained about how there was only time for teaching to the test, and how there was no time left for creativity and critical thinking.

Besides, the negative impact of high-stakes testing on teachers' and principals' relationships with students is supported by Ritt (2016) and Wyn et al. (2014). Wyn et al. reported that one of the concerns of teachers and principals interviewed revolved around the negative impact of NAPLAN on the quality of relationships in schools.

Our findings concerning the negative impacts of high-stakes testing on students' and their families' economic status and the negative impact of INUEE on schools and teachers' reputations are also significant in their own right because they suggest how the unintended consequences of high-stakes testing can extend beyond schools, and into students and their families' private and social lives.

Overall, the findings of the present study indicate that what has been implemented to supposedly improve the quality of education was in fact challenged by the majority of participating teachers and principals, who expressed their concerns about the negative impacts of INUEE on themselves, students, families, instruction and pedagogy, and school leadership. These findings critically question the fairness, usefulness, and consequential validity of INUEE. In other words, as expressed by the majority of the participants, it is doing more harm than good. However, the Iranian education system insists on the necessity of INUEE and does not show strong willingness to eliminate it in spite of its serious negative impacts.

## **6. Conclusion and Implications**

As evidenced by the results of the study, INUEE has narrowed the curriculum, disrupted the school policies, and challenged school leadership and relationships, giving rise to the deviation of the Iranian education system from moving toward its main goals which are supposed to be teaching students crucial life skills such as critical and creative thinking, decision-making, etc. Clearly, the negative impacts of INUEE will be long-lasting if the implementation of INUEE policies and teaching the tips and tricks of multiple-choice high-stakes tests continue to be considered as a priority in Iranian high schools, and teachers, principals, and students will all be the victims of this 'weapon of mass destruction' (Nichols & Berliner, 2008).

The findings of the study have certain implications for policy-makers, principals, and teachers. Educational policy makers are suggested to think of some adjustments to make INUEE fairer to the test takers. Such modifications might include the elimination of quotas, equal distribution of educational facilities, shutting down the INUEE test-preparation institutes so that all students receive similar levels of educational quality and students from lower socioeconomic families are not disadvantaged. Secondly, as studies have revealed that principals can play a positive role in students' learning and achievement (Coelli & Green, 2012; Seashore Louis et al., 2010), it behooves principals, as instructional leaders, to take appropriate actions with regard to school accountability in order to neutralize, or at least minimize, the negative consequences associated with INUEE. Finally, the teachers as the most bottom-level applicants of INUEE need to counter the adverse impacts of the test in their classroom-level operations and activities.

As for the limitations of the present study, it needs to be stated that the study was conducted in a limited region of the country including three western provinces of Iran. Therefore, generalizing the results of the study beyond the three provinces should be done with caution. Another limitation of the study is that the findings are limited to the reports obtained from the selected teachers and principals only, and, thus, highly dependent on the accuracy of the sample participants' perceptions.

In closing, as evidenced by the results of the present study, the high-stakes testing program in Iran is not producing the desired outcomes and is in fact moving in the wrong direction. Therefore, what is needed seems to be a paradigm shift in which the current high-stakes testing system is replaced with a fairer and more democratic assessment system with as few negative consequences as possible. To appropriately respond to the call for accountability and minimize the negative consequences of INUEE, the collaborative contribution of policy-makers, educational experts, and all stakeholders are deemed necessary.

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## Declaration of Conflicting Interests

The authors confirm that there is no conflict of interest to declare.

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## References

- Abbasian, G. R., & Moghimeslam, A. (2013). Washback teacher-learner's academic behavior (the case of Iranian EFL MA preparatory course). *Journal of Language and Translation*, 3(1), 21-33.  
[http://tltl.azad.ac.ir/pdf\\_514737\\_6821570804e6533e7949ed5d34993964.html](http://tltl.azad.ac.ir/pdf_514737_6821570804e6533e7949ed5d34993964.html)
- Abbasian, G. R., & Nasirian, H. (2015). Evaluation of the Iranian State University EFL Entrance Examination Test (UEEET). *Journal of Language and Translation*, 5(2), 43-59.  
[https://journals.iau.ir/article\\_524042\\_c908ed66d7925054669b22783e2d7172.pdf](https://journals.iau.ir/article_524042_c908ed66d7925054669b22783e2d7172.pdf)
- Abrams, L. M. (2004). *Teachers' views on high-stakes testing: Implications for the classroom*. Arizona State University, Education Policy Research Unit.
- Abrams, L.M., Pedulla, J.J., & Madaus, G.F. (2003). Views from the classroom: Teachers' opinions of statewide testing programs. *Theory into Practice*, 42(1), 18-29.  
DOI:10.1207/s15430421tip4201\_4
- Amrein, A. L., & Berliner, D. C. (2002). High-stakes testing, uncertainty, and student learning. *Education Policy Analysis Archives*, 10(18), 1-74. DOI:10.14507/epaa.v10n18.2002
- Amrein, A. L., & Berliner, D. C. (2003). The effects of high-stakes testing on student motivation and learning. *Educational Leadership*, 60(5), 32-38.  
[https://people.wou.edu/~girodm/611/testing\\_and\\_motivation.pdf](https://people.wou.edu/~girodm/611/testing_and_motivation.pdf)
- Ashadi, A., & Rice, S. (2016). High stakes testing and teacher access to professional opportunities: lessons from Indonesia. *Journal of Education Policy*, 31(6), 727-741.  
<https://doi.org/10.1080/02680939.2016.1193901>
- Au, W. (2007). High-stakes testing and curricular control: A qualitative meta-synthesis. *Educational Researcher*, 36(5), 258-267. <https://doi.org/10.3102/0013189x07306523>
- Bachman, L. F. (2005). Building and supporting a case for test use. *Language Assessment Quarterly*, 2(1), 1-34. [https://doi.org/10.1207/s15434311laq0201\\_1](https://doi.org/10.1207/s15434311laq0201_1)
- Barksdale, M. A., & Thomas, K. F. (2000). What's at stake in high-stakes testing: Teachers and parents speak out. *Journal of Teacher Education*, 51(5), 384-397.  
DOI:10.1177/0022487100051005006
- Berliner, D. (2011). Rational responses to high stakes testing: The case of curriculum narrowing and the harm that follows. *Cambridge Journal of Education*, 41(3), 287-302.  
<https://doi.org/10.1080/0305764X.2011.607151>
- Berryhill, J., Linney, J.A., & Fromewick, J. (2009). The effects of education accountability on teachers: Are policies too stress-provoking for their own good? *International Journal of Education Policy and Leadership*, 4(5), 1-15. <https://doi.org/10.22230/ijep.2009v4n5a99>
- Booher-Jennings, J. (2008). Learning to label: Socialisation, gender, and the hidden curriculum of high-stakes testing. *British Journal of Sociology of Education*, 29(2), 149-160.  
<https://doi.org/10.1080/01425690701837513>

- Bracey, G. (2003). *On the death of childhood and the destruction of public schools*. Portsmouth, NH: Heinemann.
- Buck, S., Ritter, G. W., Jensen, N. C., & Rose, C. P. (2010). Teachers say the most interesting things -- An alternative view of testing. *Phi Delta Kappan*, 91(6), 50-54. <https://doi.org/10.1177%2F003172171009100613>
- Buyruk, H. (2014). Standardized examinations as a teacher performance indicator and performance evaluation in education. *Trakya University Journal of Education*, 4(2), 28-42.
- Chalhoub-Deville, M. (2009). The intersection of test impact, validation, and educational reform policy. *Annual Review of Applied Linguistics*, 29, 118–131. DOI:10.1017/S0267190509090102
- Chalhoub-Deville, M. (2016). Validity theory: Reform policies, accountability testing, and consequences. *Language Testing*, 33(4), 453–472. <https://doi.org/10.1177%2F0265532215593312>
- Coelli, M., & Green, D. A. (2012). Leadership effects: School principals and student outcomes. *Economics of Education Review*, 31(1), 92-109. <https://doi.org/10.1016/j.econedurev.2011.09.001>
- Cranley, L. (2018). *An investigation into the impact of high-stakes testing, through the naplan assessment, on the teaching and learning of mathematics in one primary school* [Unpublished Master's Theses]. University of Notre Dame, Australia.
- Cronbach, L. J. (1988). Five perspectives on validity argument. In H. Wainer & H. I. Braun (Eds.), *Test validity* (pp. 3–17). Hillsdale, NJ: Lawrence Erlbaum.
- Darling-Hammond, L. (2007). Race, inequality, and educational accountability: The irony of 'No Child Left Behind.' *Race Ethnicity and Education*, 10(3), 245-260. DOI:10.1080/13613320701503207
- Donnelly, L.A., & Sadler, T.D. (2009). High school science teachers' views of standards and accountability. *Science Education Policy*, 93(6), 1050-1075. <https://doi.org/10.1002/sce.20347>
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press. [https://www.saint-david.net/uploads/1/0/4/3/10434103/rmal\\_dny.pdf](https://www.saint-david.net/uploads/1/0/4/3/10434103/rmal_dny.pdf)
- Dulfer, N., Polesel, J., & Rice, S. (2012). *The experience of education: The impacts of high stakes testing on school students and their families – An educator's perspective*. Sydney: The Whitlam Institute.
- Estaji, M., & Ghiasvand, F. (2021). IELTS washback effect and instructional planning: The role of IELTS-related experiences of Iranian EFL teachers. *Journal of English language teaching and learning*, 13(27), 163-192. DOI: 10.22034/elt.2021.45369.2369
- Farangi, M. R., & Rashidi, N. (2022). The relationship between Iranian EFL teachers' conceptions of assessment and their self-efficacy. *International Journal of Language Testing*, 12(2), 59-75. <https://doi.org/10.22034/ijlt.2022.157125>
- Firestone, W., Schorr, R., & Monfils, L. (2004). *The ambiguity of teaching to the test: Standards, assessment, and educational reform*. Mahwah, New Jersey: Lawrence Erlbaum Associates. <https://doi.org/10.4324/9781410609946>
- Fulcher, G., & Davidson, F. (2007). *Language testing and assessment: An advanced resource book*. Abingdon: Routledge.



<https://www.kau.edu.sa/Files/0005056/Subjects/Fulcher%20Davidso%20Language%20Testing%20and%20Assessment%20An%20Advanced%20Resource%20Book%20Routledge%20Applied%20Lingu.pdf>

- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine. <https://doi.org/10.4324/9780203793206>
- Gonzalez, T. E., Hernandez-Saca, D. I., & Artiles A, J. (2017). In search of voice: Theory and methods on K-12 student voice research in the US, 1990–2010. *Educational Review*, 69(4), 451-473. <https://doi.org/10.1080/00131911.2016.1231661>
- Gündoğdu, K., Kızıldaş, E. & Çimen, N. (2010). Opinions of students and teachers in relation to high school entrance exam-sbs (case of Erzurum). *Elementary Education Online*, 9(1), 316–330.
- Haney, W. M. (2000). The myth of the Texas miracle in education. *The Education Policy Analysis Archives*, 8(41), 1-323. <https://doi.org/10.14507/epaa.v8n41.2000>
- Hoffman, J.V., Assaf, L.C., & Paris, S.G. (2001). High-stakes testing in reading: Today in Texas, tomorrow? *The Reading Teacher*, 54(5), 482-492.
- Jenkins, B. (2009b). What it takes to be an instructional leader. *Principal*, 6(22), 34-37. [https://www.naesp.org/sites/default/files/J-F\\_p34.pdf](https://www.naesp.org/sites/default/files/J-F_p34.pdf)
- Jones, B. (2008). The unintended outcomes of high-stakes testing. *Journal of Applied School Psychology*, 23(2), 65-86. [https://doi.org/10.1300/J370v23n02\\_05](https://doi.org/10.1300/J370v23n02_05)
- Jones, B. D., & Egley, R. J. (2004). Voices from the frontlines: Teachers' perceptions of high-stakes testing. *Education Policy Analysis Archives*, 12(39), 1-34. DOI:10.14507/epaa.v12n39.2004
- Jones, M. G., Jones, B. D., & Hargrove, T.Y. (2003). *The unintended consequences of high-stakes testing*. Lanham, Maryland: Rowman & Littlefield Publishers, Inc.
- Jones, G., Jones, B., Hardin, B., Chapman, L., Yarbrough, T., & Davis, M. (1999). The impact of high-stakes testing on teachers and students in North Carolina. *Phi Delta Kappan*, 81(3), 199–203.
- Kane, M. (2006). Validation. In R. Brennan (Ed.), *Educational measurement* (4th ed., pp. 17–64). Westport, CT: American Council on Education and Praeger.
- Kane, M. (2013). Validating the interpretations and uses of test scores. *Journal of Educational Measurement*, 50(1), 1–73. <https://doi.org/10.1111/jedm.12000>
- Klein, S. P., Hamilton, L. S., McCaffrey, D. F., & Stecher, B. M. (2000). What do test scores in Texas tell us? *Education Policy Analysis Archives*, 8(49), 1-22. <https://doi.org/10.14507/epaa.v8n49.2000>
- Klein, A. M., Zevenbergen, A. A., & Brown, N. (2006). Managing standardized testing in today's schools. *Journal of Educational Thought*, 40(2), 145. DOI: <https://doi.org/10.11575/jet.v40i2.52570>
- Koretz, D. M., Linn, R. L., Dunbar, S. B., & Shepard, L. A. (1991). *The effects of high-stakes testing on achievement: Preliminary findings about generalizations across tests*. Paper presented at the American Educational Research Association, Chicago. <http://hdl.handle.net/1902.1/10077>
- Landry, D. (2006). Teachers' (K-5) perceptions of student behaviors during standardized testing. *Curriculum & Teaching Dialogue*, 8(1/2), 29-40. <https://hdl.handle.net/11244/7474>

- Lewis, S., & Hardy, I. (2015). Funding, reputation and targets: The discursive logics of high-stakes testing. *Cambridge Journal of Education*, 45(2), 245–264.  
<https://doi.org/10.1080/0305764X.2014.936826>
- Li, H., & Xiong, Y. (2018). The relationship between test preparation and state test performance: Evidence from the Measure of Effective Teaching (MET) project. *Education Policy Analysis Archives*, 26(64), 1-23. <http://dx.doi.org/10.14507/epaa.26.3530>
- Looney, J. W. (2009). *Assessment and innovation in education*. OECD Publishing.  
<http://dx.doi.org/10.1787/222814543073>
- Lynch, B. (2001). Rethinking assessment from a critical perspective. *Language Testing*, 18(4), 351–372. <https://doi.org/10.1177%2F026553220101800403>
- Macqueen, S., Knoch, U., Wigglesworth, G., Nordlinger, R., Singer, R., McNamara, T., & Brickle, R. (2018). The impact of national standardized literacy and numeracy testing on children and teaching staff in remote Australian Indigenous communities. *Journal of Language Testing*, 36(2), 265-287. <https://doi.org/10.1177%2F0265532218775758>
- Mahmoudi, L., & Abu Bakar, K. (2013). Iranian pre-university English teachers' perceptions and attitudes towards the Iranian national university entrance exam: A washback study. *International Journal of Education and Literacy Studies*, 1(2), 47-53.  
DOI:10.7575/AIAC.IJELS.V.1N.2P.47
- McNamara, T. (2008). The social-political and power dimensions of tests. In E. Shohamy and N.H. Hornberger (Eds.), *Encyclopedia of Language and Education, Vol. 7: Language testing and assessment* (2nd ed., pp. 415–427). Dordrecht, The Netherlands: Springer.  
[https://doi.org/10.1007/978-0-387-30424-3\\_190](https://doi.org/10.1007/978-0-387-30424-3_190)
- McNeil, L. M. (2000). *Contradictions of school reform: Educational costs of standardized testing*. New York: Routledge.  
<https://fathurrahmanbahrinsyah.files.wordpress.com/2010/04/contradictions-of-school-reform1.pdf>
- Messick, S. (1980). Test validity and the ethics of assessment. *American Psychologist*, 35(11), 1012–1027. <https://psycnet.apa.org/doi/10.1037/0003-066X.35.11.1012>
- Messick, S. (1989). Validity. In R. L. Linn (Ed.), *Educational measurement* (3rd ed., pp. 13–103). New York: American Council on Education & Macmillan.
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50(9), 741–749. <https://psycnet.apa.org/doi/10.1037/0003-066X.50.9.741>
- Misco, T., Patterson, N., & Doppen, F. (2011). Policy in the way of practice: How assessment is affecting social studies curriculum and instruction in Ohio. *International Journal of Education Policy and Leadership*, 6(7), 1–13. DOI:10.22230/ijepl.2011v6n7a303
- Moon, T.R., Brighton, C.M., Jarvis, J.M., & Hall, C.J. (2007). *State standardized testing programs: Their effects on teachers and students*. (RM07228). Storrs, CT: The National Research Center for the Gifted and Talented.  
[https://www.academia.edu/27233683/State\\_Standardized\\_Testing\\_Programs\\_Their\\_Effects\\_on\\_Teachers\\_and\\_Students](https://www.academia.edu/27233683/State_Standardized_Testing_Programs_Their_Effects_on_Teachers_and_Students)

- Mulvenon, S.W., Stegman, C.E., & Ritter, G. (2005). Test anxiety: A multifaceted study on the perceptions of teachers, principals, counselors, students, and parents. *International Journal of Testing*, 5(1), 37-61. [https://psycnet.apa.org/doi/10.1207/s15327574ijt0501\\_4](https://psycnet.apa.org/doi/10.1207/s15327574ijt0501_4)
- Musoleno, R. R., & White, G. P. (2010). Influences of high stakes testing on middle school mission and practice. *RMLE Online*, 34(3), 1-10. <https://doi.org/10.1080/19404476.2010.11462076>
- Nichols, S. (2007). High-stakes testing: Does it increase achievement? *Journal of Applied School Psychology*, 23(2), 47-64. [https://doi.org/10.1300/J370v23n02\\_04](https://doi.org/10.1300/J370v23n02_04)
- Nichols, S.L., & Berliner, D.C. (2008). Testing the joy out of learning. *Educational Leadership*, 65(6), 14-18. <file:///C:/Users/so/Downloads/TestingthejoyoutNichols.pdf>
- Nichols, P. D., & Williams, N. (2009). Consequences of test score use as validity evidence: Roles and responsibilities. *Educational Measurement: Issues and Practice*, 28(1), 3–9. <https://doi.org/10.1111/j.1745-3992.2009.01132.x>
- Oliveras-Ortiz, Y. (2015). The impact of high-stakes testing on school leadership. *School Leadership Review*, 10(2), 7-19. <https://scholarworks.sfasu.edu/cgi/viewcontent.cgi?article=1063&context=slr>
- Pedulla, J. J., Abrams, L. M., Madaus, G. F., Russell, M. K., Ramos, M. A., & Miao, J. (2003). *Perceived Effects of State-Mandated Testing Programs on Teaching and Learning: Findings from a National Survey of Teachers*. National Board on Educational Testing and Public Policy, Lynch School of Education, Boston College. <https://www.bc.edu/research/nbetpp/statements/nbr2summary.pdf>
- Pendergast, D., & Bahr, N. (2005). *Teaching middle years: Rethinking curriculum, pedagogy and assessment*. Crows Nest, NSW: Allen and Unwin. <https://doi.org/10.4324/9781003117780>
- Polesel, J., Dulfer, N., & Turnbull, M. (2012). *The experience of education: The impacts of high stakes testing on school students and their families: Literature Review*. Sydney, NSW: The Whitlam Institute. [file:///C:/Users/so/Downloads/The\\_Experience\\_of\\_Education\\_The\\_impacts\\_of\\_high\\_st.pdf](file:///C:/Users/so/Downloads/The_Experience_of_Education_The_impacts_of_high_st.pdf)
- Reichel, A.G. (2009). Unintended consequences: The teacher's story. In Price, T.A. & Peterson, E. (Eds.), *The myth and reality of No Child Left Behind: Public education and assessment* (pp. 131-150). Lanham, MD: University Press of America, Inc.
- Rezagah, K. (2022). Iranian EFL teachers' assessment literacy knowledge: The impact of the educational system on teachers' classroom assessment practices. *International Journal of Language Testing*, 12(2), 76-94. <https://doi.org/10.22034/ijlt.2022.157126>
- Ritt, M. (2016). *The impact of high-stakes testing on the learning environment* (Unpublished master's thesis). St. Catherine University. Minnesota. [https://sophia.stkate.edu/cgi/viewcontent.cgi?article=1660&context=msw\\_papers](https://sophia.stkate.edu/cgi/viewcontent.cgi?article=1660&context=msw_papers)
- Sahlberg, P. (2015). *Finnish lessons 2.0: What can the world learn from educational change in Finland?* New York: Teachers College Press. [https://www.academia.edu/34598324/Finnish\\_Lessons\\_2\\_0\\_What\\_Can\\_t\\_Pasi\\_Sahlberg](https://www.academia.edu/34598324/Finnish_Lessons_2_0_What_Can_t_Pasi_Sahlberg)

- Sass, D.A., Seal, A.K., & Martin, N.K. (2011). Predicting teacher retention using stress and support variables. *Journal of Educational Administration*, 49(2), 200-215.  
DOI:10.1108/09578231111116734
- Scot, T. P., Callahan C. M., & Urquhart J. (2008). Paint-by number teachers and cookie-cutter students: the unintended effects of high-stakes testing on the education of gifted students. *Roeper Review*, 31(1), 40-52. <https://doi.org/10.1080/02783190802527364>
- Seashore Louis, K., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). *Investigating the links to improved student learning*. Minnesota: University of Minnesota. <https://hdl.handle.net/11299/140885>
- Segall, A. (2003). Teachers' perceptions of the impact of state-mandated standardized testing: The Michigan educational assessment program (MEAP) as a case study of consequences. *Theory and Research in Social Education*, 31(3), 287-325.  
DOI:10.1080/00933104.2003.10473227
- Shohamy, E. (2001). *The power of tests: A critical perspective on the uses of language tests*. London: Pearson.
- Smith, M.L. (1991). Put to the test: The effects of external testing on teachers. *Educational Researcher*, 20(5), 8-11. <https://doi.org/10.2307/1176396>
- Swain, K. (2014). *Middle years students' perceptions and reactions to NAPLAN: The student voice* (Unpublished doctoral thesis). Griffith University, Queensland. [https://research-repository.griffith.edu.au/bitstream/handle/10072/367248/Swain\\_2015\\_02Thesis.pdf?sequence=1](https://research-repository.griffith.edu.au/bitstream/handle/10072/367248/Swain_2015_02Thesis.pdf?sequence=1)
- Thompson, G. (2013). NAPLAN, My School and accountability: Teacher perceptions of the effects of testing. *International Education Journal: Comparative Perspectives*, 12(2), 62-84. <https://files.eric.ed.gov/fulltext/EJ1017709.pdf>
- Thompson, G., & Harbaugh, A. G. (2013). A preliminary analysis of teacher perceptions of the effects of NAPLAN on pedagogy and curriculum. *The Australian Educational Researcher*, 40(3), 299-314. DOI:10.1007/S13384-013-0093-0
- Wall, D. (1997). Impact and washback in language testing. In C. Clapham & D. Corson (Eds.), *Encyclopedia of language and education* (Vol. 7, pp. 291-302). Dordrecht: Kluwer Academic.
- Watson, C., Johanson, M., Loder, M., & Dankiw, J. (2014). Effects of high-stakes testing on third through fifth grade students: Student voices and concerns for educational leaders. *Journal of Organizational Learning and Leadership*, 12(1), 1-11. <https://www.semanticscholar.org/paper/Effects-of-High-Stakes-Testing-on-Third-through-and-Watson-Johanson/022af366fca617ad6b0762a0cef21651bfeaa434>
- Wright, W. E. (2002). The effects of high stakes testing in an inner-city elementary school: The curriculum, the teachers, and the English language learners. *Current Issues in Education*, 5 (5), 1-23. [file:///C:/Users/so/Downloads/1622-Article%20Text-6911-1-10-20150526%20\(3\).pdf](file:///C:/Users/so/Downloads/1622-Article%20Text-6911-1-10-20150526%20(3).pdf)
- Wright, W.E., & Choi, D. (2006). The impact of language and high-stakes testing policies on elementary school English language learners in Arizona. *Education Policy analysis Archives*, 14(13), 1-71. <https://doi.org/10.14507/epaa.v14n13.2006>

- 
- Wyn, J., Turnbull, M., & Grimshaw, L. (2014). *The experience of education: The impacts of high stakes testing on school students and their families. A qualitative study.* Sydney, NSW: Whitlam Institute. [http://www.whitlam.org/the\\_program/high\\_stakes\\_testing](http://www.whitlam.org/the_program/high_stakes_testing)
- Zhao, M. R., Mu, B. L., & Lu, C. P. (2016). Teaching to the test: approaches to teaching in senior secondary schools in the context of curriculum reform in China. *Creative Education*, 7, 32-43. <http://dx.doi.org/10.4236/ce.2016.71004>

