

LOW-PERFORMING JORDANIAN POSTSECONDARY STUDENTS: WHAT ARE THEIR BELIEFS CONCERNING THE CLASSROOM ASSESSMENT PRACTICES OF THEIR INSTRUCTORS?

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ABSTRACT

In this study, we investigated the beliefs of low-performing (high-risk) postsecondary students in the Hashemite Kingdom of Jordan concerning the assessment practices of their instructors. Data were collected from 77 students identified by their colleges as low achieving in terms of their grade-point average (GPA). We employed the Student Perceptions of Assessment Practices Inventory (SPAP), a self-report instrument with 30 Likert-type items. Results indicate low-performing students believe their instructors focus their assessment on three main areas: Expectations, the Communication of Assessment Practices, and Organizational Assessment Practices. Moreover, we found evidence suggesting low-performing students believe their instructors more often rely on traditional, paper-and-pencil tests than on alternative assessment methods. Results also indicate there is no relationship between student gender, subject area (college), and beliefs concerning assessment practices.

Keywords: *postsecondary education, student beliefs, low-performing students, alternative assessment*

1. INTRODUCTION

The assessment of student learning outcomes is a necessary component of education at all levels, from primary school to postsecondary education. In postsecondary education, especially, traditional forms of assessment, including paper-and-pencil examinations, are quite common. Such examinations (tests) are generally administered a few times per semester, and they typically play a significant role in the assignment of final course grades. However, in recent years, there have been increasing calls for the use of alternative forms of assessment, which may be associated with deeper student learning (Dochy, Segers, & Sluijsmans, 1999; Rust, 2002). Furthermore, such assessment practices may better facilitate student learning and retention, especially among low-performing students (Yorke & Thomas, 2003). Alternative forms of assessment may be called *student-focused*, *learner-focused*, *authentic*, or *formative* assessment practices. For the purposes of this paper, the term *alternative assessment* will be used in the generic sense as it encompasses all of these types of assessment; this is as opposed to traditional assessment, which will be regarded as paper-and-pencil testing.

Alternative assessment practices differ from traditional paper-and-pencil tests in that they are designed to provide students with multiple opportunities to demonstrate their knowledge and skills, as well as to learn from the assessment process, itself. Unlike traditional test-based assessments, alternative assessment practices allow for the integration of assessment and instruction in a manner that facilitates active student learning (Dochy et al., 1999). Alternative assessment may include peer assessment, student self-assessment, projects, portfolios, the use of technology in the assessment process, or the assessment of multiple drafts of written work or projects.

Formative assessment, or assessment for learning, has long been a focus in primary school through secondary schools around the world (see, for example, Black & Wiliam, 2003). Regarded as an essential element of the teaching and learning cycle, classroom assessment is used by teachers and students to improve learning outcomes (Elwood & Klenowski, 2002). Specifically, teachers use formative assessment results to make necessary modifications to their teaching efforts (Elwood & Klenowski, 2002; Popham, 2008). Moreover, through the use of formative assessment, teachers can help students to become better informed about their strengths and weaknesses, enabling them to make necessary and timely adjustments to improve their learning efforts (Elwood & Klenowski, 2002; Taras, 2002; Yorke, 2003; Yorke & Thomas, 2003).

Researchers (e.g., Haydel & Roeser, 2002; Schäffner, Burry-Stock, Cho, Boney, & Hamilton, 2000) have examined the perceptions of primary-secondary students concerning the assessment practices of their teachers. However, to date, there has been very little research concerning the assessment perceptions of postsecondary students, in general, or of low-performing students, in particular. This is in spite of the fact that higher education institutions around the world face pressures to improve student

retention and degree completion rates (van den Berg & Hofman, 2005; Yorke, 2001). One means by which they may be able to increase graduation rates is by addressing the instructional and assessment needs of low-performing students, who may be at increased risk for failure to complete their higher education programs (DesJardins, McCall, Ahlburg, & Moye, 2002).

In this paper, we will address two research questions: (1) What are the most and least used assessment practices in Jordanian institutions of higher education, based on the beliefs of low-performing students; and (2) Do the assessment beliefs of low-performing students differ based on their gender, college, and/or student level? We will briefly examine the characteristics of low-performing students in terms of learning outcomes and retention/success. We will discuss the role of classroom assessment in the teaching/learning process. Finally, we will examine the research literature on student beliefs concerning classroom assessment.

2. CLASSROOM ASSESSMENT, IN GENERAL

Assessment is considered the servant of learning because it facilitates teaching and learning by fostering the examination of student skills and knowledge (Ramsden, 2003). The assessment of learning is not only essential to the learning process, itself, but to the experiences of the student (Taras, 2002). The function of assessment is not only to assess learning, but also to provide students with information concerning learning goals and strategies (Rouseff-Baker & Holm, 2004; Taras, 2002). In short, the effective use of classroom assessment can increase student engagement through metacognition (Rouseff-Baker & Holm, 2004), or the development of an understanding concerning what they know and how they know it.

Several experts (e.g., Banta, 2006; Brookhart, 2004; Havnes, 2004; Taras, 2002; Yorke, 2001) have argued that assessment influences student learning. When students receive effective feedback, they are better able to gauge the strengths and weaknesses of their efforts; they can then make necessary adjustments in those efforts (Yorke, 2001). Student learning approaches have been found to influence the ways in which students perceive assessment, and vice versa (Steadman, 1998). Therefore, it is important to examine postsecondary student beliefs concerning the assessment methods and practices used by their instructors. It is also necessary to understand these perceptions in order to assist students in their engagement in the educational process. Student beliefs concerning their instructor's assessment practices influence their learning strategies (Entwistle, 1991), which ultimately impact the quality of their learning outcomes (Entwistle, 1991). Moreover, there is recognition (e.g., La Lopa, 2004; Leach, Neutze, & Zepke, 2001; Taras, 2002) that students have a legitimate role in the assessment process. Thus, it is considered good pedagogy to involve students in the assessment of their own learning.

However, there is a need for more research concerning the involvement of students in the assessment process (Ecclestone & Swann, 1999; Sivan, 2000; Taras, 2002). Research should be undertaken to facilitate the process of narrowing the gap between student beliefs and teacher beliefs and practices

concerning assessment. Additionally, postsecondary institutions should continue working to improve the assessment process in order to foster continuous improvement (López, 2004).

3. ALTERNATIVE ASSESSMENT

With growing knowledge and performance demands in an increasingly complex and ever-changing world, teachers and students are encountering the need to shift from traditional paper-and-pencil tests to alternative forms of assessment (Segers & Dochy, 2001). Nevertheless, there are considerable barriers in the road between theory and practice (Segers & Dochy, 2001). This may be associated with what Yorke (2001) has described as a “weak” conceptualization of formative assessment within higher education institutions, or a lack of understanding of the theoretical constructs underpinning formative assessment (Yorke, 2003). In any case, this lack of understanding may lead to the ineffective use and/or the underuse of this important instructional tool (Yorke, 2001).

For primary through secondary education, there is a plethora of research on the process of classroom assessment, in general (see, for example, Black & Wiliam, 2003). However, there is relatively little research on this topic in postsecondary education (Baume, Yorke, & Coffey, 2004). This may be due to the fact that assessment in higher education is regarded mostly in terms of its external meanings and outcomes (Swann & Ecclestone, 1999). However, there is a need to focus attention on the use of classroom assessment in postsecondary education in order to meet the internal demands of learners in the classroom.

Nevertheless, in many postsecondary institutions and in many countries, there may exist constraints that work against the use of formative assessment practices and procedures (Yorke, 2003). Specifically, institutional rules and regulations may forbid or limit the use of authentic, or performance-based, assessments. Administrators and instructors may also favor the use of more traditional forms of assessment (for example, paper-and-pencil tests), perhaps in the belief that these forms of assessment are more objective and easier to defend to students, parents, and other stakeholders. According to the work of Yorke (2003), institutional barriers to formative assessment practices include an increased emphasis on the use of summative assessment results, increasing student/faculty ratios which reduce the amount of individualized attention available for students, and increased research demands for faculty which takes time away from the process of providing formative feedback to students. Additionally, Yorke (2003) has argued that the effective use of formative assessment requires instructor knowledge and skills, including knowledge of the psychology of giving and receiving feedback, and knowledge concerning the stages of student intellectual and moral development. For their part, students must also have appropriate levels of knowledge and skills, including the ability to act on the basis of their developed understandings once they receive feedback from their instructors (Yorke, 2003).

Finally, there may be disparity in the use of alternative assessment across disciplines. Yanowitz and Hahs-Vaughn (2007) found evidence indicating that faculty in the sciences (natural sciences, computer

science, and engineering) were less likely to use student-centered assessment practices than faculty in non-science disciplines. Using the work of Huba and Freed, Yanowitz and Hahs-Vaughn defined student-centered assessment practices as: peer evaluations, competency-based grading, and multiple drafts of student work. All of these are considered to provide opportunities for active student engagement in learning.

Assessment is considered an important variable associated with student learning outcomes (Havnes, 2004; Struyven, Dochy, & Janssens, 2005; Wiliam, Lee, Harrison, & Black, 2004; Yorke, 2001, 2003). When students receive useful, appropriate feedback, they are better able to understand the strengths and weaknesses of their efforts (Yorke, 2003); they can thus make necessary adjustments to improve their learning outcomes (Struyven et al., 2005; Yorke, 2003). Moreover, through feedback, instructors both reveal what students are supposed to learn and how well they are learning it (Taras, 2002).

Formative feedback involves a partnership between student and instructor that works as a continuous, collaborative loop in which instructors provide useful feedback that then allows students to both improve, and show evidence of improvements in, their learning (Taras, 2002). Moreover, instructors can use assessment results to make appropriate instructional decisions aimed at the facilitation of student success (Havnes, 2004). This may be especially the case with authentic (or performance-based) assessments, which are often based on real-world activities, such as the performance of a task or the completion of a project.

4. LOW-PERFORMING STUDENTS

Low-performing (or low-achieving) students pose serious challenges for educators. There is some evidence that such students differ from their higher-performing peers (Betoret & Tomás, 2003; McCoach & Siegle, 2001). Specifically, Betoret and Tomás (2003) found evidence that low-performing students hold different beliefs than their high-performing peers in terms of knowledge acquisition and evaluation. Low-performing and/or high-risk students may not fully understand postsecondary course requirements, and they may be inadequately prepared to meet those requirements. Such students may also experience difficulties with time management (Yorke & Thomas, 2003). They may not understand how to effectively study and prepare assignments. Additionally, some may not be adequately prepared to meet postsecondary requirements (Lowe & Cook, 2003). They may not be sufficiently invested in their majors or programs of study, or they may not feel that they really “belong” to their postsecondary community (Lowe & Cook, 2003). Moreover, some students may experience social capital deficits in terms of higher education requirements. Such students may not have access to appropriate role models who can help them to navigate the multiple requirements associated with successful course completion (Yorke & Thomas, 2003).

Postsecondary institutions may have limited influence over some of the variables associated with student retention (Tinto, 1975; Tumen, Shulruf, & Hattie, 2008; Yorke & Longden, 2004). However, experts (e.g., Black & Wiliam, 1998; Taras, 2002; Yorke, 2001) have argued that the teaching/learning

process can be improved with appropriate classroom assessment practices, including useful, timely feedback and opportunities for students to learn about their strengths and weaknesses. Moreover, students, themselves, are reported to emphasize the usefulness of feedback assessment to help them increase their learning outcomes (Taras, 2002), especially in terms of deep learning (Higgins, Hartley, & Skelton, 2002). Students are not only the subjects of assessment, but stakeholders in the assessment process, itself (Donald & Denison, 2001).

Student retention is impacted by numerous factors, both institutional and personal (Tinto, 1975; Tumen et al., 2008; Yorke & Longden, 2004). Some of these variables may be beyond the power of the institution to impact (Yorke & Longden, 2004). For example, student variables, including gender (Scott, 2005), ethnicity/race (Scott, 2005), socioeconomic status (SES) (Walpole, 2003), age (Lowe & Cook, 2003; Scott, 2005), type of degree (Scott, 2005), educational program/area of study (Lowe & Cook, 2003; Tumen et al., 2008), level of commitment to program completion and year in the program (Tumen et al., 2008), feelings of “belonging” or integration within the institution (Tinto, 1975), and sense of commitment to their higher education success (Tinto, 1975) have been found to be associated with student retention.

In his (1975) seminal work on student dropout, Tinto described a theory concerning the process by which students drop out from institutions of higher education. Describing his model as a predictive, rather than descriptive, one, Tinto argued that dropout typically involves an interaction between one or more variables: student commitment to the institution, degree aspirations, and integration in the institution’s academic and social systems. Postsecondary institutions that aim to improve their retention rates should make active efforts to address all of these areas.

5. STUDENT BELIEFS

Nevertheless, individual student beliefs may impact student success. Adams, Thomas, and King (2000) have found evidence that students may hold divergent beliefs about classroom assessment. Moreover, students may make different uses of assessment results. Students may perceive grades and grading criteria in a different light than do their instructors (Donald & Denison, 2001). Specifically, instructors may perceive grades as simply a means by which to provide feedback regarding student intellectual development (Donald & Denison, 2001); students may perceive grades in terms of their use as gatekeepers (Donald & Denison, 2001) regarding their employment goals, or they may regard grades as a reflection of their ability to please their instructors, rather than to learn to think critically. Furthermore, there is some evidence that individual students may receive different benefits from various assessment practices, depending on their achievement level (Srinivasan, Hauer, Der-Martirosian, Wilkes, & Gesundheit, 2007) and gender (Adams et al., 2000; Alnabhan, Al-Zegoul, & Harwell, 2001), among other characteristics. These divergent perceptions can lead to frustration on the part of all as they try to negotiate different concerns and orientations (Donald & Denison, 2001).

Even so, few researchers have examined the beliefs of students concerning the assessment methods used by their instructors. Therefore, in order to facilitate student academic success, it is first necessary to gain insight into student perceptions concerning the assessment practices of their instructors (Segers & Dochy, 2001). It is especially important to increase our knowledge concerning the assessment beliefs of low-achieving students in order to better inform instructors and institutions of higher education in their attempts to foster student success. We need to gain a better understanding of student beliefs and level of understanding concerning their instructors' assessment practices. Once this understanding is achieved, instructors can be better prepared to use assessment as a tool to facilitate student learning.

6. RATIONALE FOR THIS STUDY

In regard to academic success, college grade-point average (GPA) remains the best predictive variable; students are often labeled as low-achieving based on their GPAs (Reason, 2003). Most universities still use teacher-made tests to assess student learning (Frank & Barzilai, 2004), and instructors often serve as the key element in identifying low-achieving students (Thompson and Ruth, 2002). However, there is often little or no available information concerning the reliability and validity evidence of the assessment procedures that are employed.

In this study, we have focused on low-achieving student beliefs concerning the assessment practices of their instructors. Our aim in doing this was to gain greater understanding of: (a) the phenomenon of student retention, and (b) low-achieving student beliefs concerning the assessment practices of their instructors. When researchers and practitioners better understand student beliefs about their instructors' assessment practices, they are able to determine the nature and extent of any student misperceptions. Then, practitioners can be better able to: (a) address any student misperceptions, and (b) provide effective guidance to enable such students to develop and employ more effective learning strategies.

7. METHODOLOGY

7.1 Participants

We used a four-step random procedure to select the participants for this study. First, we randomly selected four universities out of the (then) 10 public universities in Jordan. Secondly, we randomly selected approximately 50% of the colleges in each university. Thirdly, we randomly selected from each college four academic program advisors; the academic program advisors were asked to give the instrument to every low-achieving student in their programs. Through this procedure, we were able to obtain data from 77 high-risk students. Based on their regulations, universities that use the letter grading system identify as low-achieving those students with a grade-point average (GPA) of less than 2; universities that use the number grading system identify as low-achieving those students with a GPA of less than 60. Table 1 details the distribution of the sample.

Table 1

Distribution of the Sample According to Gender, College, and Student Level

Variable	Level	<i>n</i> *	%*
Student Level	Freshmen	18	25
	Sophomores	24	33
	Juniors	20	27
	Seniors	9	12
College	Education	7	9
	Arts and Social Sciences	37	51
	Science and Engineering	15	20
	Economics and Business	12	16
Gender	Male	41	56
	Female	32	41

* Note: The *n*=77, but there are some missing cases.

7.2 Instrumentation

The instrument used for this study is the Student Perceptions of Assessment Practices Inventory (SPAP) (Alquraan, 2007). The instrument consists of 30 Likert-type items on a 5-point scale (1=always [or almost always] used, 2=often used, 3=sometimes used, 4=rarely used, 5=never [or almost never] used). The instrument was developed through the assistance of a panel of experts (*n*=7) in educational assessment, who made recommendations concerning item changes (e.g., modifications, addition, and deletion). Alquraan (2007) used responses from 924 undergraduate postsecondary Jordanian students who had not been categorized according to GPA; Alquraan validated the SPAP using exploratory factor analysis with a Principle Components solution and Varimax rotation. Alquraan's results indicated five subscales (Expectations and the Communication of Assessment Practices, New/Modern Assessment Methods, Traditional Assessment Methods, Organizational Assessment Practices, and Reporting Practices), which explain 46.8% of the total variance. Alquraan also found item-to-total correlations ranging from .386 to .652. Cronbach's alpha reliability coefficients for the total instrument and its subscales, according to the work of Alquraan (2007), are shown in Table 2.

Table 2

Number of Items and computed Cronbach's Alpha Levels for Each Subscale and the Total SPAP

Factor Name	Number of Items	Cronbach's α
Expectations and the Communication of Assessment Practices	11	.825
New/Modern Assessment Methods	4	.720
Traditional Assessment Methods	5	.749
Organizational Assessment Practices	6	.734
Reporting Practices	4	.656
Total SPAP Instrument	30	.900

It should be noted that, in the present study, the sample size ($n=77$) is insufficient to perform a confirmatory factor analysis to determine whether Alquraan's (2007) factor structure holds up with this sample of respondents.

Findings

To address the first question, the researchers employed SPSS 17.0 to calculate the means and standard deviations for participant responses to each item and the subscales. This information is detailed in Tables 3 and 4 below.

Table 3

The Mean and the Standard Deviation for Each Item in Order by the Mean

Item	M	SD
After tests are scored, my teacher provides an opportunity for students to discuss the correct responses.	4.22	.96
My teacher avoids interrupting students as they are taking tests.	4.11	1.07
My teacher's tests match what he/she teaches.	4.07	1.04
I know what to study to prepare for the tests in this class.	3.98	1.10
My teacher provides a good environment during test administration.	3.98	1.19
My teacher returns graded assessment tools in a timely manner.	3.75	1.14
My teacher's assessment criteria are understandable.	3.66	1.24
My teacher helps students understand how to complete assessment tasks.	3.55	1.27
My teacher presents situations where I can reflect on my work.	3.54	1.21
In my teacher's syllabus, there is information concerning the assessment methods to be used during the semester.	3.54	1.11
My teacher presents oral feedback concerning tests.	3.49	1.20
My teacher uses assessment to determine my needs.	3.48	1.23
My teacher uses papers to assess my learning.	3.45	1.34
My teacher uses assessment tools to examine what I have learned.	3.45	1.20
My teacher assesses higher order thinking.	3.45	1.29
My teacher's standards and criteria are known prior to assessment/test time.	3.44	1.18
My teacher presents written feedback concerning tests.	3.42	1.21
My teacher discloses the mean and standard deviation of class grades after each test.	3.41	1.30
My teacher uses assessment outcomes to develop our curriculum.	3.31	1.12
My teacher uses assessment to motivate learning.	3.29	1.22

Table 3 (continued)

The Mean and the Standard Deviation for Each Item in Order by the Mean

Item	M	SD
My teacher assesses students' prior knowledge.	3.28	1.27
My teacher uses graded homework to assess my learning.	3.23	1.36
My teacher provides assessment tasks that are based on real life.	3.10	1.27
My teacher uses take-home exams to assess student learning.	3.05	1.33
My teacher discloses the percentage of students who obtain scores lower than mine.	2.98	1.37
My teacher uses projects to assess my learning.	2.88	1.25
My teacher uses portfolios to assess my learning.	2.81	1.30
My teacher uses new technology (e.g., computer-based testing) to assess my learning.	2.71	1.44
My teacher uses unannounced quizzes.	2.45	1.26
My teacher uses audio/video products to assess my learning outcomes.	2.24	1.31

Note. $n=77$.

Table 3 shows that the item means range from 2.24 to 4.22 and the standard deviations range from 0.96 to 1.44. This suggests that low-achieving students hold the strongest beliefs concerning these statements: "After the tests are scored, my teacher provides an opportunity for students to discuss the correct responses," "My teacher avoids interrupting students as they are taking tests," "My teacher's tests match what he/she teaches," "I know what to study to prepare for the tests in this class," and "My teacher provides a good environment during test administration." On the other hand, low-achieving students hold the weakest beliefs concerning these statements: "My teacher uses audio/video products to assess my learning outcomes," "My teacher uses unannounced quizzes," "My teacher uses new technology (e.g. computer-based testing)," "My teacher uses portfolios in assessing students learning outcomes," and "My teacher uses projects to assess my learning."

Table 4

Number of Items in the Subscale, the Mean, Standard Deviation, and Average Rating for Each Subscale

Subscale Name	Number of Items	M	SD	Average Rating
Expectations and the Communication of Assessment Practices	11	41.10	7.51	3.73
New/Modern Assessment Methods	4	10.88	3.54	2.72
Traditional Assessment Methods	5	15.07	4.66	3.01
Organizational Assessment Practices	6	20.70	4.56	3.45
Reporting Practices	4	13.32	3.54	3.33
Total SPAP	30	101.46	18.52	3.38

Note. The scale ranged from 1 (never [or almost never] used) to 5 (always [or almost always] used).

Table 4 shows that the highest average ratings were given to the subscales labeled “Expectations and the Communication of Assessment Practices” (3.73) and “Organizational Assessment Practices” (3.45), while the lowest average ratings were given to “New/Modern Assessment Methods” (2.72) and “Traditional Assessment Methods” (3.01). This suggests that low-achieving students believe that instructors in higher education focus on expectations and the communication of their assessment practices more often than they focus on modern or new assessment practices, or even on assessment methods in general. This result seems to be supported by Frank and Barzilai’s (2004) findings, which indicate that paper-pencil assessment is used more frequently than other methods. This result seems to show that low-achieving students believe that the methods used to assess their learning outcomes are limited to traditional paper-pencil tests. In this study, students reported that 87.16% of their course final grade was allocated to paper-pencil testing. This is also in keeping with the requirements frequently employed in Jordanian universities. In our examination of the revised regulations for Jordanian universities, we found that most ask instructors to conduct at least three paper-pencil tests every semester (two during the semester and the third one at the end of the semester), with the request that these tests form at least 80% of the final grade in each course.

To address the second question, non-parametric statistics (Mann-Whitney and Kruskal-Wallis Tests) were employed to determine whether differences were found in terms of assessment beliefs between student gender, college, and student level. These results are reported in Tables 5, 6, and 7.

Table 5

Mann-Whitney Results From Testing the Relationship between Gender and Low-Achieving Students' Beliefs Concerning Assessment

Gender	<i>n</i>	Mean Rank	M-W	<i>z</i>	<i>p</i>
Male	41	40.05	531	1.39	0.164
Female	32	33.09			

Table 5 shows that there is no difference between low-achieving students' assessment beliefs and their gender ($Z=1.39$, $p=0.164$). This indicates that both male and female low-achieving students hold similar beliefs about assessment in higher education.

Table 6

Kruskal-Wallis Test of Low-Achieving Student Assessment Beliefs Between Colleges

College	<i>n</i>	Mean Rank	Chi-Square	<i>p</i>
Education	8	45.38	1.965	0.580
Arts and Social Sciences	38	39.17		
Science and Engineering	17	33.32		
Economics and Business	14	41.79		

Table 6 shows that there are no differences between colleges in terms of the assessment beliefs of low-achieving students ($\text{Chi-Square}=1.965$, $p=0.58$). This result suggests that low-achieving students from different colleges share the same beliefs about assessment practices used to assess their learning outcomes.

Table 7

Kruskal-Wallis Test of Low-Achieving Students' Assessment Beliefs and Student Level

Student Level	<i>n</i>	Mean Rank	Chi-Square	<i>p</i>
First (Freshman)	Year 18	41.33	2.622	0.454
Second (Sophomore)	Year 24	35.67		
Third (Junior)	Year 22	33.25		
Fourth (Senior)	Year 10	44.35		

Table 7 shows that there are no differences between student level and low-achieving student assessment beliefs (Chi-Square=2.622, $p=0.454$).

8. Summary and Conclusions

Our results indicate that low-achieving students hold the same beliefs concerning the assessment practices of their instructors, regardless of gender, level, or college. Furthermore, our results indicate that students believe that their instructors do not often employ alternative assessment methods. This suggests that, according to the beliefs of low-achieving students, paper-pencil testing is the most commonly used form of assessment by their instructors. This leads to questions concerning the means by which grades are determined, especially in regards to low-achieving students. Specifically, is it possible that a greater reliance on traditional paper-and-pencil tests is, itself, problematic for low-performing students? Further, is it possible that alternative forms of assessment may better meet the needs of these students? In the future, research efforts should be undertaken to examine these issues.

We suggest that postsecondary administrators and instructors should pay more attention to the assessment process. Furthermore, instructors should be encouraged to use alternative assessment methods besides paper-pencil tests. Finally, faculty and administrators in postsecondary education should consider other institutional means by which they can facilitate the success of all students, including those who are labeled as low-achieving.

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