Holland’s Theory and Patterns of College Student Success

Executive Summary

Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success

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July 2006
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The primary purpose of this report is to illustrate the benefits that would logically accrue from reliance on Holland’s person-environment fit theory in advancing our understanding of and capacity to improve college student success in postsecondary education. The three basic premises of Holland’s theory as applied in higher education settings are as follows:

- The choice of a career or field of training is an expression of one’s personality, and most people can be classified by their resemblance to six personality types (Realistic, Investigative, Artistic, Social, Enterprising, Conventional) based on their distinctive patterns of attitudes, interests, and abilities.

- There are six corresponding academic environments, each dominated by their analogous personality type, that reflect the prevailing physical and social settings in society.

- Congruence of students and their academic environments is related to higher levels of educational success.

The choice of Holland’s theory to guide this project resulted from its capacity to help resolve several crucial problems inherent in contemporary efforts to understand college student success. While initially proposed as a theory of careers to assist individuals in their selection of occupations in which they have the greatest likelihood of success, Holland has consistently and repeatedly noted that the hypotheses about educational behaviors in his theory are identical to those for vocational behavior. Holland’s theory thus focuses specifically on either vocational or educational success. In addition to the appropriateness of the theory to study student success, Holland and his colleagues have developed psychometrically sound instruments for the measurement of constructs in the theory. Finally, Holland’s theory places equal emphasis on attributes of individuals and academic environments in efforts to understand student success in postsecondary education. This aspect of the theory responds to our concern about the imbalance that exists in many contemporary efforts in which attention to psychological considerations far surpasses attention to sociological considerations.

Analytical Strategies and Findings

The current project is based on data that enable us to examine patterns of self-reported change and stability in students’ attitudes, interests, and abilities over a 4-year period. We examine these patterns of change and stability within the context of the congruence and socialization assumptions of Holland’s
theory. The congruence assumption stipulates that students’ likelihood of growth in their initially prominent characteristics (i.e., those associated with their dominant personality type) is jointly dependent on the student’s own personality type and the congruence or “fit” between it and the student’s entry into an academic environment that requires, reinforces, and rewards that particular repertoire of abilities and interests. The socialization assumption of Holland’s theory stipulates that longitudinal patterns of change and stability in students’ abilities, interests, and abilities are singularly dependent on the academic environment they enter and the distinctive cluster of abilities and interests that is reinforced and rewarded by students’ chosen academic environment.

These two assumptions lead to different longitudinal patterns or profiles of student success. The profile of student success that emerges from the congruence assumption is a more peaked or highly differentiated profile reflecting further growth in students’ initially prominent characteristics and either stability or decline in their other sets of abilities and interests. The alternative profile of student success based on the socialization assumption reflects a more balanced or less highly differentiated profile at the time of graduation than at the time of college entry. This more balanced or less highly differentiated profile at the time of graduation results from students remaining stable or declining slightly in their initially prominent characteristics and growing considerably, sometimes dramatically, in the set of abilities and interests reinforced and rewarded by their chosen, but oftentimes incongruent, academic environment.

Thus, the contribution of academic environments to student success in postsecondary education depends on one’s definition of “success.” Within the more traditional perspective of the congruence assumption of Holland’s theory, academic environments play an instrumental role in assisting students’ subsequent growth in their initially prominent characteristics, leading to a more peaked or highly differentiated profile in which one set of abilities and interests grows prominently while others remain stable or decline. Within the context of the less traditional perspective of the socialization assumption of Holland’s theory, academic environments play an instrumental role of assisting students in their development of whatever repertoire of abilities and interests their chosen (but oftentimes incongruent) environments seek to reinforce and reward, leading to a more balanced or less differentiated profile across multiple clusters of abilities and interests.

We conclude from our findings that academic environments (e.g., major fields) are an absolutely essential component in efforts to understand student success in postsecondary education. Our conviction regarding the centrality of academic environments in understanding and facilitating student success grows from our findings that students learn what they study, which is to say the distinctive repertoire of professional and personal self-perceptions, competencies, attitudes, interests, and values that their respective academic environments distinctly reinforce and reward. The centrality of academic environments is also enhanced by our findings that they are equally successful in promoting the learning of students whether their personalities are congruent or incongruent with the various academic environments.

**Research, Policy, and Programmatic Implications**

Our findings lead us to offer a variety of suggestions concerning the research, policy, and practical implications of greater reliance on Holland’s theory in efforts to understand and promote student success in postsecondary education. We do not offer Holland’s theory as a panacea for our perceptions of certain weaknesses and deficiencies of current traditions that guide much research on student success, but rather seek to show the advantages of a theory-based approach that has direct applicability to the investigation of student success in the full project report.
The practical implications of our findings are perhaps most clear in terms of efforts to assist college students in their selection of “appropriate” academic majors (i.e., environments). Past reliance on the psychological perspective in Holland’s theory has led to encouraging students to select academic majors that are congruent with their dominant personality type so as to maximize the likelihood of their success in their chosen areas of study. In a sense, student choice is constrained by their existing personality profile at the time they enter college, and their choices are limited to those academic majors that are most likely to maximize their existing initially prominent characteristics. Our collective findings supporting the sociological perspective of Holland’s theory suggest that the advice provided students need not be constrained by students’ past or present personality profile, but rather can be grounded in a more developmentally and futuristically oriented perspective based on the broad repertoire of competencies and interests that students desire to develop as a result of their collegiate experiences. This approach, which is much less restrictive and constraining, focuses the advice given students on what they hope to be rather than what they presently are.

Our findings also have practical and policy implications for the assessment of college student outcomes in that they suggest that academic environments should be a key element in efforts to assess “student learning outcomes.” Our knowledge and experience suggest that contemporary efforts typically assess student performance on the basis of a common or uniform university-wide set of criteria that focus almost exclusively on students’ acquisition of content knowledge. Seldom are the criteria used to assess student performance based on the student outcomes associated with the distinctive cognitive and affective outcomes that the respective academic environments seek to reinforce and reward. This lack of systematic attention to academic environments has a number of deficiencies that are discussed in the full report. We urge institutional and governmental officials to focus assessment efforts at the level of academic environments; we further recommend that the choices of assessment criteria and interpretation of student performance be based on students’ academic majors.

Our findings also suggest that Holland’s theory and information routinely available to colleges and universities about their students can be useful to faculty members and academic leaders in their efforts to understand, assess, and promote students’ success in their courses and academic programs. We found, for example, that while the patterns of growth by congruent and incongruent students in each of the four academic environments we examined are remarkably equivalent, in all instances incongruent students (who do “learn” as much as their congruent peers over a 4-year period) begin and end their college careers with lower scores on the respective sets of interests, abilities, and values that each of the four academic environments seek to reinforce and reward. Are they less “successful”? We think not. In short, what faculty members and academic leaders would do well to understand is that student performance, and ultimately their success, must be judged in relation to students’ possession of the interests, abilities, and values that the respective academic environments seek to reinforce and reward at the time students enter the program.