Pathways to STEM Bachelor’s and Graduate Degrees for Hispanic Students and the Role of Hispanic-Serving Institutions

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Abstract

Utilizing the concept of “transfer agents,” developed by Bensimon and Dowd based on Stanton-Salazar’s sociological depiction of institutional agents, this study demonstrates the ways in which administrators, counselors, and faculty can help Latina and Latino community college students navigate transfer pathways to obtain a bachelor’s degree in science, technology, engineering or mathematics (STEM). Nearly 90 interviews were conducted with administrators, faculty, staff, and students at Hispanic Serving Institutions (HSIs) in order to document the roles of institutional agents and the institutional characteristics that support transfer from a community college to the STEM baccalaureate for Latina and Latino students.

Research Question

What is the Role of Institutional Support and Institutional Agents at Hispanic Serving Institutions in promoting Hispanic Student Educational Aspirations and Attainment in STEM fields?

Institutional Agents

Individuals in education who have the capacity and willingness to support students by providing them with resources and opportunities (Stanton-Salazar 1999, 2001, 2010).

Help students achieve higher academic outcomes by making them better equipped with information, assistance and assets.

An Advocate……prompts and protects “their” students. Drives students to succeed. Is often ideologically motivated.

A Networking Coach……models key behavior. Knows important and influential people. Teaches others how to meet and interact with key players. Develops vertical and up and with high status colleagues.

A Knowledge Agent……is in a position of power. Provides knowledge pertinent to navigating the system. Knows the system. Questions the system.

A Coordinator……assesses student need. Identifies resources to address need. Ensures students utilize the resources. A Coordinator will have aspects of the Institutional Broker and Bridging Agent.

A Bridging Agent……introduces students to key resources. Has a strong social network. Knows what key players do. Opens doors. When they take on more they become…

A Institutional Broker……negotiates agreements between two or more parties. Accesses resources on behalf of students. Knows what resources are available. When they take on more they become…

A Institutional Support……provides support with academic and career decision-making.

The CUE Equity Model and Latino STEM Toolkit

Research findings have been applied to the development of a STEM Toolkit: Tools for Increasing Latina and Latino STEM Success,” to be featured soon on our website (http://cue.usc.edu). This toolkit is part of the CUE Equity Model and helps both learners and individuals understand the issues facing Latina and Latino STEM students. It identifies how their actions and behaviors affect these students’ success and demonstrates techniques agents can use to help students understand the culture of their institution and make effective use of the resources available to them. The STEM toolkit features tools for data-informed decision making and professional development activities, such as profiles of institutional agents with reflection exercises and self-assessment inventories of institutional culture.

Institutional Agent Characteristics

A Knowledge Agent…
- Is in a position of power...
- Provides knowledge pertinent to navigating the system...
- Knows the system...
- Questions the system...

An Advocate…
- Prompts and protects “their” students...
- Drives students to succeed...
- Is often ideologically motivated...

A Networking Coach…
- Models key behavior...
- Knows important and influential people...
- Teaches others how to meet and interact with key players...
- Develops vertical and up and with high status colleagues...

A Coordinator…
- Assesses student need...
- Identifies resources to address need...
- Ensures students utilize the resources...

An Institutional Support…
- Provides support with academic and career decision-making...

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