

## An institutional Diversity Model

By

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### Abstract

An important element of a University mission should be to include diversity within its student's population. The United States population is very diversified and many universities still lack diversity within their student population. This paper presents a model that incorporates minority student's growth within the existing student population as part of the overall university's mission.

The proposed model focuses on university's student enrollment and presents a step-by-step procedure of how to increase the number of minority students within the overall student population. The model incorporates the mission of increased diversity under the main mission of the university. To increase diversity on a university campus, the model looks at existing university student population and sets a target number over a specified future time frame of 10 years by looking at the proportion of the existing minority population and current enrollment trend of the university. A realistic target number can be established by looking at existing minority population within the state and within the surrounding states with potential student minority population. The model can only be successful if it is included within the framework of the university's overall mission as established by the university's president as part of his / her diversity strategy and commitment to increase the number of minorities among the student body, faculty and staff. The model includes programs such as recruitment, retention, orientation and professional development workshops.

The allocation of resources plays a vital role in the implementation of Diversity Model. The model includes two parts, one for undergraduate and one for graduate. Both needs to be tackled by undergraduate and graduate program coordinators. The programs need to be actively incorporated and coordinated within each department of various colleges under the main umbrella of the university's overall mission. The program coordinators work as team with competition to cooperate and successfully implement the diversity mission under the goal of the institution of higher learning. The success of the model requires reasoning abilities to understand the vitality of diversity. And team member's aggressiveness, motivation, creativity, interpersonal skills, financial support

and recognition of the importance of diversity within the student population play a vital role in the successful implementation of this program. The model includes an assessment feature and provides a mechanism that gives feedback from all colleges within the university for continuous monitoring of program assessment and improvement.

## **Introduction**

It is important to admit the fact that many institution of higher education (IHE) lack full diversity in admitting blacks and other minority students. The National Science Foundation data shows that a fraction of the 1,600 black who earned doctorate degrees in 2002 will be hired as university professors. Blacks make up 3 percent of the legal field, 4 percent of college faculty and 5.2 percent of entertainers, writers and professional athletes in the U.S. (1). Under the formula for academic failure Raspberry stated that one study found that the home of the average white kindergartner had 93 books, the average black less than half as many (2). Recognizing these facts and the discrimination that exists in the social structure of our educational system, it is essential for every HIS to work harder and use and allocate their resources toward remedying these problems. This paper presents a model that may be used by IHE to enhance its existing graduate minority enrollment. It is essential for any IHE to have a short- and long-range strategic plan. To achieve the dynamic requirements of diverse growth, it is mandatory to increase the existing undergraduate and graduate (UG & G) minority student enrollment to a specific number by a target year including the existing institutional enrollment trend. The model suggests that a UG & G minority program must be established first and should be housed in both undergraduate and graduate school as part of the IHE organizational structure. Dedicated and committed efforts are needed throughout the university colleges and departments to actively participate in the implementation of such mode through recruitment, retention, orientation and professional development workshops. An effective and workable model is to place such a mission under the university's overall mission. The university mission will have the ability to continuously deliver productive students to the society. The keep up with diversity, offering of fellowships and financial aid is needed to attract qualified underrepresented social/ethnic groups. Such a mission will be accomplished through vigorous recruitment of top quality graduate students, maintaining and hiring diversified top administrators and staff with faculty engaged in state-of-the-art teaching, research and service. The paper presents steps needed to enhance minority enrollment. Finally, there is a mechanism that will provide feedback from all colleges within the institution for the continuous assessment and improvement of overall programs.

In general, graduate students from minorities, who demonstrate financial need, are still significantly underrepresented in the percentage of doctorates earned, comprising less than five percent of the total PhD population (3). Most U.S. universities strive to build upon leading programs of exceptional teaching, innovative research and dedicated service by maintaining a strong curriculum, a highly qualified and committed faculty, outstanding facilities, and essential funding. This paper presents a model to be used by IHE with an objective to enhance the enrollment of qualified UG & G minority students. Increased fellowship with an evaluation plan is presented with steps for recruitment and

stages for student selection. Effective strategies are presented to increase the flow of qualified underrepresented racial/ethnic groups. After the enrollment of UG & G students, it is important to keep track of each student's academic progress. A student's academic advisor plays a vital role in supporting and retaining students until the completion of the student's academic program.

### A Proposed IHE Diversity Model

Figure 1 presents a proposed Institution of Higher Education Diversity Model (IHEDM). The model looks at existing total number of minority students (MS) and projects MS growth over a time span. The MS growth is through aggressive recruiting and retention.

The model looks at both UG & G programs and incorporates them under the mission of IHE. Both UG & G programs are linked and they should be enhanced at the same level of efforts with proper allocation of resources to succeed. In the graduate levels, there are many minority students of superior ability who demonstrate financial need and plan to pursue a PhD degree in a designated area of national need. The IHEDM should offer fellowships to such students and increase their numbers by aggressively promoting recruitment, retention and orientation of those talented students from traditionally underrepresented backgrounds.

### A Process to Achieve IHE's Overall Objectives

The first and utmost important item is the development of a Strategic plan within IHE. All colleges and departments within a typical IHE must develop strategic plans consistent with the IHE's strategic plan. The IHE strategic plan can only be successful, if the strategic plans of the departments and colleges are in full support of the IHE's strategic plan. Each college and its departments must work closely with the UG admission office and dean of the graduate school to identify, recruit and retain qualified underrepresented graduate students in line with the goals and objectives of the IHE program. The IHE must allocate certain numbers of fellowships (FS) to each college. From the FS pool each college allocate a certain number of FS to each of their departments. This process assists each department to use their own recruitment process in conjunction with their college and university recruitment program to attract graduate minority students. The IHE must develop an aggressive recruitment, retention and orientation program. Figure 1 presents an IHE model strategic plan that provides a basis for each department to develop and enhance their recruitment program under the IHE's main umbrella.

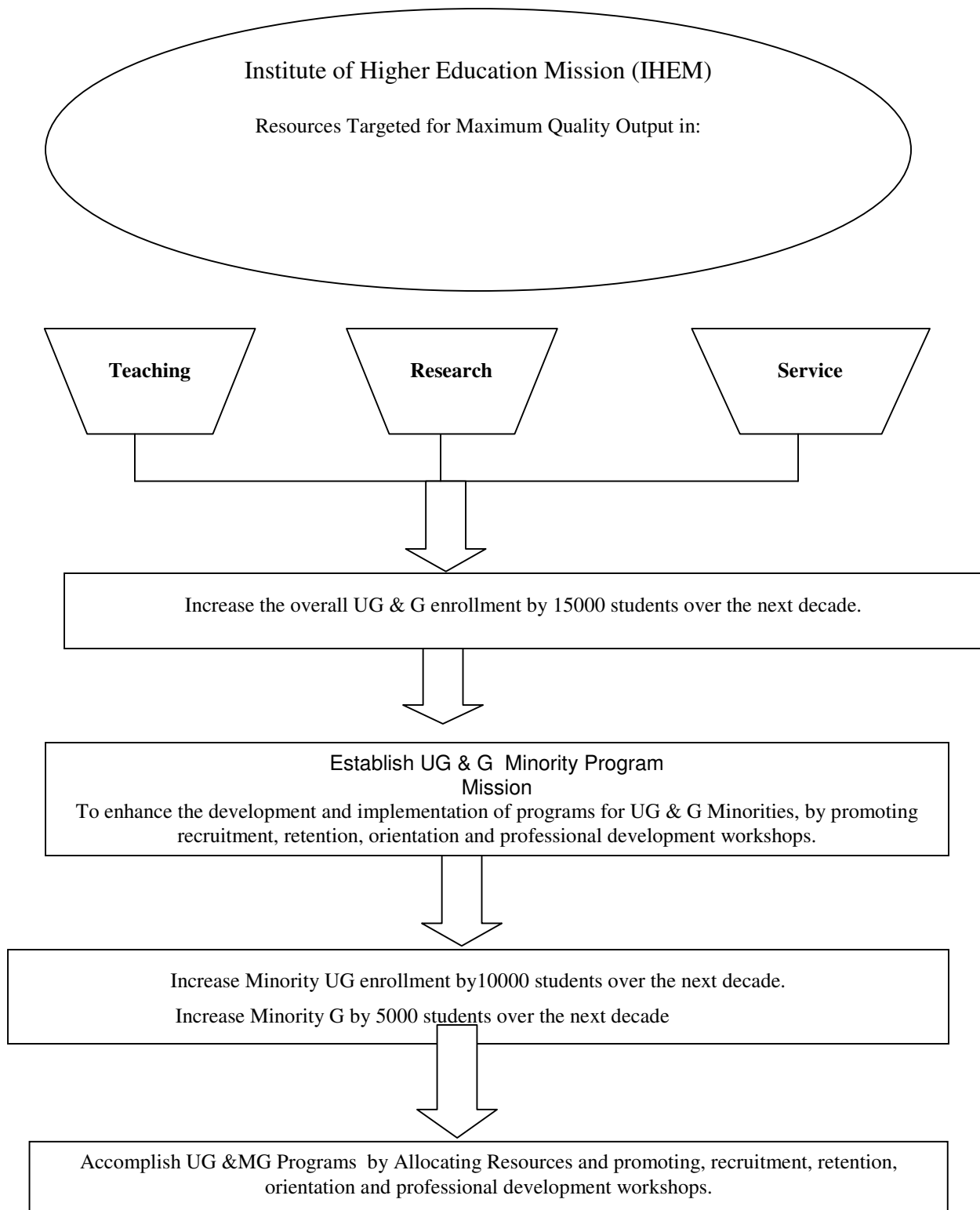


Figure 1. (Contd. on next page)

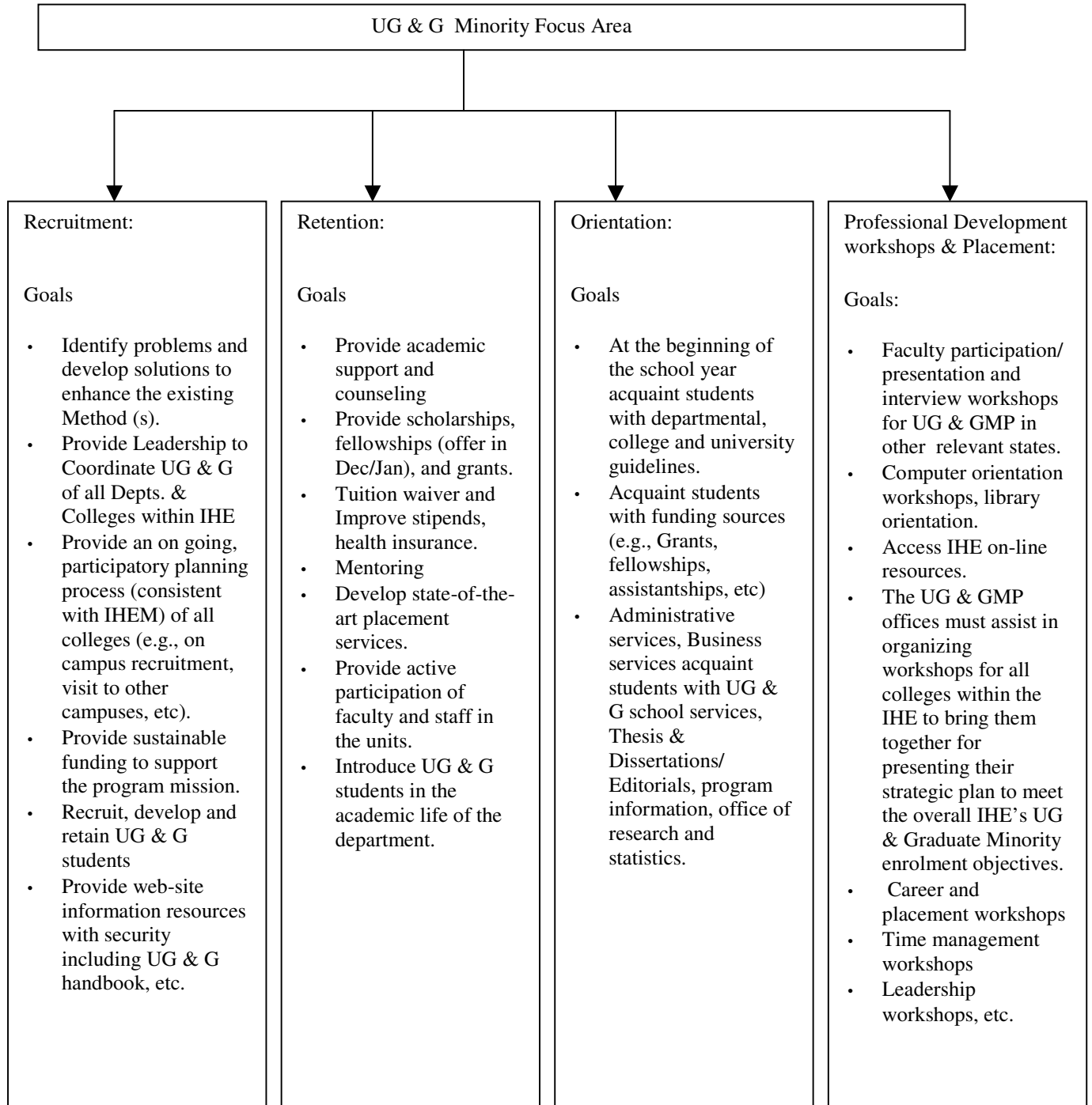


Figure 1. A proposed model of the IHE Mission to enhance the overall undergraduate and graduate enrollment of minority students.

## EVALUATION PLAN

### Relate the Specific Goals and Objectives of the IHE Program

The goals of the IHE program are to increase the number of qualified graduate and undergraduate minorities from traditionally underrepresented backgrounds. Each department within the college should closely work with the offices of the IHE Graduate and undergraduate Minority Assistant Dean to aggressively recruit minority students. A typical pattern of recruitment and stages for student selection include:

- Defining the pool of qualified individuals
- Recruiting applicants
- Screening out applicants who do not meet minimum qualifications
- Selecting the most acceptable from among all qualified applicants
- Persuading recruits to accept offers to pursue careers or advanced study in a field
- Training and socializing recruits
- Providing opportunities for successful recruits to make a smooth transition from training into meaningful employment trajectories.

The process above can be used by each department to recruit existing qualified minority students within the department as well as from other universities. Vigorous minority recruitment, backed by financial assistance such as fellowships, can yield improvements in each department's enrollment, retention, and graduation rates. Figure 1 presents goals for recruitment, retention, orientation and placement. An institution can establish its objective to increase graduate minority students enrollment, by a certain number, over the next decade. Considering the current minority graduate student enrollment trend, each department will use their existing allocated number of fellowships and provide support to a certain number of new graduate and undergraduate minority students over the next decade. Increasing the enrollment of talented graduate students from traditionally underrepresented backgrounds would definitely meet the set objective of any IHE diversity program.

### Assess the Effect of Offering IHE's Fellowships to Minority Students

The purpose of the IHE diversity program should be to realize and understand barriers to academic mobility and to identify effective strategies to increase the flow of underrepresented racial/ethnic groups. The departments within each college should be able to successfully achieve the IHE goal by recruiting and increasing the number of assistantships to new graduate students of superior ability who demonstrate financial need and plan to pursue PhD degrees in a designated area of national need. The IHE's fellowship should be offered to those qualified persons of different racial and ethnic backgrounds, genders and ages and persons with disabilities. With the help of the IHE fellowship program, each department's retention and graduation rates will be significantly improved. Furthermore, it will have a large impact on the expansion of the overall candidate pool.

## Process and Product Evaluation

The process includes working closely with the Deans of the UG and G Minority programs to recruit qualified students. After a successful recruitment process, the evaluation questions become critical to the successful completion of the education of the UG and G students. Once students are enrolled in the IHE's fellowship program, the designated course advisors in each department should meet with the candidates on a regular basis to evaluate the student's educational activities and progress. Each candidate will have a separate file including the list of courses for the duration and completion of his/her B.S., M.S., and PhD program. On a regular basis, the designated professor will meet the IHE's Fellowship Program Directors for both UG, and G students. The professor will brief the program director on the status of the student's progress. Accordingly, the director of fellowship program will update his management plan regularly.

## Process and Product Evaluation Measures

An advisor, who is also a student mentor, will be assigned to each student. A mentor-mentee relationship will be established. A mentor shares valued skills to improve the mentee's marketability. The mentor will work closely with the mentee to broaden the mentee's educational perspective, support the mentee's academic and social endeavors, foster activities in academic organizations and other leadership roles and consistently serve as an available resource (4). Data from Table 1 enable student advisors to assess a student's progress and provide complete assessment reports to the IHE Fellowship Program Directors.

## Data Collection Procedures

The IHE Fellowship Program Directors will develop a spreadsheet including each candidate's name, gender and ethnic background, such as American Indian or Alaskan, Asian or Pacific Islander, African American, Hispanic American and person with disabilities and others. Other developed spreadsheets will include course lists of candidates with possible graduation dates, work schedules, regular meeting schedules, work progress on a daily, weekly, monthly and semester basis. This type of data collection procedure is very effective in retaining and evaluating a student's overall academic standings. Students and advisors must be responsible for developing assessment data that is updated regularly and kept by all parties involved in the assessment program.

## Applicants' Accessibility to Their Data Record

Each UG and G student has full access to his or her work progress. Students maintain their work progress records (e.g., courses, grades, etc., Table 1). Similar assessment tables should also be developed to reflect the student's research work progress. From these tables, applicants are able to analyze their work, adjust and make improvements on a regular basis, and report to their advisors. Reports can regularly be collected by a student advisor and submitted to the IHE's Fellowship Project Directors. The directors evaluate the reports, make necessary comments and returns to the student's advisors.

## Time-Line Chart

A table can be prepared showing student name, admission date, semester attended (e.g., Fall, Spring, Summer). For instance such a table can be compared with another table (work progress) showing student name, list of activities, person responsible, start date, completion date and status. These types of tables, including Table 1, for each candidate should provide key evaluation processes and benchmarks reflecting each candidate's overall progress.

TABLE 1. Typical List of Courses for a Graduate Student Pursuing a Master's Degree

|                             |                                 |         |  |
|-----------------------------|---------------------------------|---------|--|
| Name                        | <u>Kitti</u>                    | SN      | <u>2221 -122 59</u>                        |
| Area of Study               | <u>PUBLIC WORKS ENGINEERING</u> | Degree  | <u>Sought</u>                              |
| M.S.                        |                                 |         |  |
| Committee Chairman          | <u>DR. FAZIL T. NAJAFI</u>      | Option: | Report <input checked="" type="checkbox"/> |
| Expected Date of Graduation | <u>Fall 2003</u>                | Thesis  | <input type="checkbox"/>                   |

| Course Number | Course Title                     | Term    | Cse Cr | Des Hrs | Anal Hrs | Grade |
|---------------|----------------------------------|---------|--------|---------|----------|-------|
| ENS 5449      | Scholarly Writing                | Fall 02 | 03     | 0       | 0        | S     |
| CGN 6936      | Graduate Seminar                 | Fall 02 | 01     | 0       | 0        | S     |
| CCE 5035      | Construction Planning&Scheduling | Fall 02 | 02     | 2       | 0        | A     |
| CGN 5606      | Public Works Management          | Fall 02 | 03     | 1       | 2        | A     |
| CCE 6037      | Civil Engineering Operation I    | Fall 02 | 02     | 2       | 0        | A     |
| CES 5607      | Behavior of Steel Structure      | Spr 03  | 03     | 2       | 1        | A     |
| CGN 5135      | Project Optimization & TQM       | Spr03   | 03     | 2       | 1        | A     |
| CGN 5605      | Public Works Planning            | Spr 03  | 03     | 2       | 1        | A     |
| SUR 6395      | Topic in GIS                     | Spr 03  | 03     | 0       | 3        | A     |



|          |                                   |         |    |   |   |   |
|----------|-----------------------------------|---------|----|---|---|---|
| CGN 6905 | Special Problems in CE            | Sum03   | 04 | 0 | 0 | A |
| STA 6166 | Statistical Methods in Research I | Fall 03 | 04 | 0 | 0 | A |

## CONCLUSION

In most IHE in the U.S. the enrollment of persons with different racial and ethnic backgrounds has been low for the past ten years. A typical model is presented in this paper. The model is flexible and can be used by any IHE to increase the enrollment of UG and G minority students. To make the model work, IHE needs to have a ten-year projection and target certain numbers of UG and G minority students by looking at existing numbers and should allocate resources and provide fellowships to qualified minority students. Student advisors play a vital role in retaining and keeping track of student's academic progress and making sure that they complete their study program and graduate within the specified time period. The student advisors must take responsibility of advising students throughout their academic careers. The IHE program directors must require regular students academic progress reports from advisors. If students are having any academic problems, advisors must develop strategy with students to resolve problems and assist them in their academic career.

## List of References

1. The Gainesville Sun, a local newspaper, Gainesville, Florida, Nov. 17, 03
2. The Gainesville Sun, a local newspaper, Gainesville, Florida, Oct.14, 03
3. Pearson & Leggon, 1987, "Black, Hispanic and White doctoral students: Before, during and after enrolling in graduate school," Educational Testing Service, Princeton, NJ
4. University of Florida Minority Mentor Program, 2002-2003, Handbook, University of Florida, Gainesville, Florida

## Acknowledgement

The model idea came from reading " The University of Florida Strategic Plan," developed in August 2002 by Dr. Charles E. Young, the President of the University of Florida.

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Dr. Najafi is a professor of Civil and Coastal Engineering at the UF. He earned his BS, MS, and PhD degrees in Civil Engineering from Virginia Polytechnic Institute and State University. He has worked for 37 years in government, industry, and education. Dr. Najafi has been a participating member of several engineering societies including ASCE, TRB and ASEE.