

THE "TYC Physics Site Selection Instrument"

The SPIN-UP/TYC project is interested in identifying "outstanding" physics programs at two year colleges. We appreciate your cooperation in helping us establish a data base of physics programs for the TYCs in the country. Choose the answer to each question that best describes your physics program.

1a. How has the number of students taking physics in your program changed in the last five years?

- Increased more than or equal to 10%
- Increased less than 10%
- Stayed approximately the same
- Decreased

b. How has the number of students at your institution changed in the last five years?

- Increased more than or equal to 10%
- Increased less than 10%
- Stayed approximately the same
- Decreased

2. In the last five years, how has the number of programs on your campus that require students to take physics changed?

- The number of programs has increased
- The number of programs has remained the same
- The number of programs has decreased

3a. How many full-time physics faculty members does your TYC campus have?

- One
- Two
- Three
- Four
- Five
- Six
- Seven
- Eight or more

3b. How many part-time physics faculty members does your TYC campus have?

- One
- Two
- Three
- Four
- Five
- Six

- Seven
- Eight or more

4a. We are interested in the number of science, technology, engineering, and math (STEM) students that transfer from your TYC to a four-year institution. For the last five years, what is the average number of STEM students per year per physics faculty member who have transferred to a four year institution?

- Zero
- Between 0 and 15
- Between 15 and 30
- Greater than 30

4b. Over the last five years, how has this average number of STEM students per year per faculty member changed?

- Decreased
- No Change
- Increased by less than 10%
- Increased by more than 10%

5a. Over the last five years, what has been the average percentage of female students in your physics class?

- Less than 15%
- Between 15% and 30%
- Greater than 30%, which is better than the national average
- Female students are over represented among our physics students compared to the student body at our institution.

5b. How has the number of female students taking physics changed over the last five years?

- Decreased
- No change
- Increased by less than 10%
- Increased by more than 10%

6a. Over the last five years, what has been the average percentage of underrepresented minorities in your physics class?

- Less than 5%
- Between 5% and 15%
- Greater than 15%, which is better than the national average
- Underrepresented minorities are over represented among our physics students compared to the student body at our institution.

6b. How has the number of underrepresented minority students taking physics changed over the last five years?

- Decreased
- No change

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- Increased by less than 10%
- Increased by more than 10%

7a. Over the last five years, what is the average number of students per year enrolled in physics at your campus who plan to become K-12 teachers?

- Less than 2
- Between 2 and 5
- Between 5 and 15
- Greater than 15

7b. How has the number of pre-service K-12 teachers who take one of your physics courses changed over the last five years?

- Decreased
- No change
- Increased by less than 10%
- Increased by more than 10%

8a. How many of your physics faculty (full-time and part-time) are making serious efforts to improve the quality of the courses they teach (reading the physics education literature and trying to apply it, restructuring a course to incorporate recent scientific and technological developments, developing a new course to interest different audiences, etc.)

- All of them
- Most of them
- A few of them
- None of them

8b. For those faculty making serious efforts to improve the quality of the courses they teach, do they have documented evidence of any improvement?

- Yes, one or a few of them
- Yes, all of them
- No

8c. Please briefly explain what changes were made in their courses.

8d. Which national assessment tools do your faculty use regularly in their teaching?

Please

check all that apply.

- Force Concept Inventory
- Force & Motion Conceptual Evaluation
- Mechanics Baseline Test
- Conceptual Surveys of Electricity, Magnetism, or Electricity and Magnetism

Others (please identify)

9a. Do your faculty, institution, and/or an external group periodically evaluate how effective your program is in preparing physic students for success at transfer institutions?

- Yes, periodically
- Yes, but not on a regular basis
- No

9b. For success in the workforce?

- Yes, periodically
- Yes, but not on a regular basis
- No

10a. When was the last major upgrade in laboratory equipment for your introductory course?

- Five years ago or more
- Between two and five years ago
- It was done within the last two years

10b. When was the last major revision in the laboratory curriculum for your introductory course?

- Five years ago or more
- Between two and five years ago
- It was done within the last two years

10c. Please briefly explained what changes were made in their laboratory curriculum.

11a. Does your Physics Program offer special courses or components of courses for physics students, such as honors courses or components, projects, courses for future teachers or others?

- Yes, several
- Yes, one
- No

11b. Does your Physics Program offer courses or components of courses for technology students?

Yes, several

-
- Yes, one
- No

12. On the average, how many times each year do each of your physics faculty participate in professional development opportunities off campus?

- More than five
- Three to five
- One or two
- Zero

13. How many extracurricular activities does your Physics Program or TYC offer to your physics students that enhance their physics experience (such as a Society of Physics Students chapter, other STEM clubs, field trips, involvement in physics activities on campus, science teams, or others)?

- More than two
- One or two
- None

14. If you have technology students in your physics courses, does your Physics Program work with technology programs on campus and/or local businesses and industries to enhance student education and the transition for students to the workforce?

- Yes
- No
- Not Applicable

15. Does your Physics Program work with local four year institutions and/or local school districts to enhance student education and the transition for students through their formal education?

- Yes
- No

16. Which of the following groups have a major impact on your physics course offerings, their content and their methodology? (Check all that apply.)

- all physics faculty
- other STEM faculty
- physics students
- non-physics students
- administration
- alumni
- physics faculty at transfer institutions
- members of the industrial/business communities
- members and publications of the general physics/physics education community
- other (identify)

17. What do you think is your TYC Physics Program's "claim to fame" as an outstanding

physics program? Please be specific and provide details.

Name of Your Institution:

Contact person information:

Name:

Address:

City:

State:

Zip Code:

Email:

Your name (if not the contact person):