

Section 18 Education

NUMBER 18.1 EDUCATION STRATEGY COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

POLICY

The purpose of the Education Strategy Committee is to encourage, propose, and advocate for innovative programs that support and advance the educational mission of INFORMS. In particular, the Committee's mission is to foster the development of academic programs in OR/MS and analytics, promote pursuit of education and successful careers in OR/MS and analytics, and support OR/MS and analytics professionals in their pursuit of high quality professional development.

PROCEDURES

Membership

The members of the Education Strategy Committee are appointed by the Vice President of Education with approval of the Board. Normally, the committee will consist of 5-10 appointed members, including student, academic, and industry representatives. All members shall serve for a 2-year term with the possibility of reappointment for an additional term. New members will be appointed annually to stagger the terms and provide continuity. Committee members will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable. The Education Strategy Committee is part of the Education Group cluster of committees whose Board Liaison is the Vice President of Education. The Director of Education and Industry Outreach shall be an *ex officio* member of the committee. The Vice President of Education will serve as Chair.

The Vice President of Education is elected for a two-year term by the membership of INFORMS, normally an INFORMS general election, according to the bylaws of the organization. Candidates for the position should have demonstrated experience in education leadership along with active participation in the functions of the Institute. The Vice President may run unopposed for a second two-year term.

Functions

- 1. Act as a coordinating body of all of the education-related activities of INFORMS. Provide a structure for the incubation of new ideas, the sharing of progress of ongoing projects, and the collaboration across committees.
- 2. Promote the inclusion of OR/MS and analytics concepts, skills, and processes in business, engineering, mathematics, and other relevant educational programs.
- 3. Support members in their pursuit of teaching excellence in OR/MS and analytics.
- 4. Foster educational outreach to K-12, community college, and undergraduate students as well as faculty to increase awareness of OR/MS and analytics tools, applications, and career options.
- 5. Encourage programs to expose undergraduate students to OR/MS and analytics, particularly those that encourage pursuit of graduate degrees and professional opportunities in these disciplines.
- 6. Facilitate lifelong professional development opportunities for OR/MS and analytics professionals.

Relation to the Board

The Education Strategy Committee will report to the Board through the Vice President of Education. Reporting is by written reports submitted at least one month prior to the NFORMS annual meeting.

NUMBER 18.1 EDUCATION STRATEGY COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

Meetings

The committee will meet at each INFORMS annual meeting. Other meetings will take place as needed via teleconference and e-mail communication.

RELATED DOCUMENTS:

INFORMS Policies and Procedures Manual, Section 2.1 General Committee Procedures INFORMS Policies and Procedures Manual, Section 4.3 Nominations and Elections for the Board

NUMBER 18.2 EDUCATION OUTREACH COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING; 2020 WINTER BOARD MEETING

POLICY

The primary purpose of the Education Outreach Committee is to encourage students toward eventual careers in OR/MS and analytics, to raise awareness of these disciplines and their relevant applications among K-12, community college and undergraduate college students and faculty, and support/promote the teaching of OR/MS and analytics in K-12, community college, and early college curricula.

PROCEDURES

Membership

The Education Outreach Committee shall consist of a chair, two vice chairs, and any other INFORMS member who is interested in developing outreach strategies to students and faculty at all educational levels. The Chair shall be appointed by the Vice President of Education with approval of the Board. The vice-chairs shall be appointed by the chair with approval of the Vice President of Education. The chair and vice-chairs shall serve for a 3-year term with the possibility of reappointment for an additional term. The committee may establish subcommittees. The Education Outreach Committee Chair, with input from the Vice President of Education, shall appoint the chairs of established subcommittees. The chair and vice-chairs will be responsible for setting and facilitating the implementation of the strategic vision of the committee. The chair, vice-chairs, and any chairs of established subcommittees will be the decision-making body of the committee. Officers will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable. It is expected that at least one member of the Education Outreach Committee be a liaison from the Committee on Teaching and Learning.

As his/her term of office nears its end, the Education Outreach Committee Chair shall poll (in written form) his/her committee members about their interest in chairing the Committee. Based on these responses, the Education Outreach Committee Chair shall make chair recommendations to the Vice President of Education. It is preferred that the chair should have served previously as a member of the committee or another relevant committee (education and/or outreach).

Functions

The committee's emphasis shall be concentrated on providing resources for middle school, high school, community college, and undergraduate college teachers to integrate OR/MS and analytics principles into existing courses or to introduce new courses/modules highlighting these disciplines. The committee will recommend activities and, upon approval of the Education Strategy Committee (and the Board when necessary), will develop creative and innovative educational programs and materials. The Committee is also responsible for organizing or assisting with workshops for teachers and/or administrators and meeting with state and local education policy-makers to promote the value and applications of OR/MS and analytics. All outreach with state and local policy-makers must be coordinated with the Director of Public Affairs and Marketing.

NUMBER 18.2 EDUCATION OUTREACH COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

To foster leadership and encourage widespread member involvement, the Education Outreach Committee shall delegate activities and duties to members of the committee, and should draw upon volunteer efforts from the Committee on Teaching and Learning as much as possible.

Review

The Education Strategy Committee will review the committee's work periodically, but not less than once every four years, to determine whether the P&P and the committee are still aligned and continuing to benefit INFORMS and our members.

RELATED DOCUMENTS:

NUMBER 18.3 PROFESSIONAL DEVELOPMENT COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

POLICY

The Professional Development Committee oversees the strategic direction and implementation of professional development in analytics and operations research. The program may encompass all effective methods of adult learning, including in-person and online courses. The topics covered in the program should strike a balance between wide coverage and availability, the goal of promoting INFORMS as a valuable society within the analytics and operations research communities, and the need for demand to meet operational minimums as defined by the Board.

PROCEDURES

Membership

The committee shall consist of a chair, a vicechair, and up to six additional members. All members, including the chair, shall serve for a 3-year term with the possibility of reappointment for an additional term. New members will be appointed annually to stagger the terms and provide continuity. The chair shall be appointed by the Vice President of Education with the approval of the Board. The vice-chair and additional members shall be appointed by the chair with the approval of the Vice President of Education. Officers and committee members will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable. The Professional Development Program Manager shall serve as an *ex officio* member of the committee.

Functions

The Professional Development (PD) Committee is responsible for overseeing NFORMS' professional development program and activities. This includes but is not limited to:

- 1. Strategic Review of the landscape of professional development in operations research, management science, and analytics to identify appropriate opportunities for expansion, targeted audiences, potential conflicts, and strategies for differentiating INFORMS PD offerings from competitors.
- 2. Development and revision of criteria by which instructors, whether new or continuing, should be evaluated. These criteria should include dimensions of technical strength, effective delivery, and pedagogical expertise.
- 3. Review of all new instructors, biennial review of continuing instructors, and annual review of the schedule of course offerings.
- 4. Development and revision of an assessment plan by which success of the program will be evaluated. This assessment should ensure that content and delivery of all courses meet INFORMS quality standards, that the program continues to support INFORMS strategic objectives, and that the program attains and retains financial solvency.
- 5. Tri-annual review of the Pr of ession al Development Program based on the assessment and data collection plans, in collaboration with the Vice President of Education and the Director of Education and Industry Programs.
- 6. Annual review and approval of the Professional Development Program budget for recommendation to the Vice President of Education and the Director of Education and Industry Programs.

NUMBER 18.3 PROFESSIONAL DEVELOPMENT COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

Relation to the Board

The Professional Development Committee is part of the Education Group cluster of committees and reports to the Board through the Vice President of Education. Reporting is by written reports submitted to the Vice President of Education at least one month prior to the INFORMS annual meeting.

Meetings

The committee will meet as needed throughout the year, primarily by teleconference, but also in person as needed at one or more of the INFORMS meetings.

Review

The Education Strategy Committee will review the committee's work periodically, but not less than once every four years, to determine whether the P&P and the committee are still aligned and continuing to benefit INFORMS and our members.

RELATED DOCUMENTS:

NUMBER 18.4 COMBINED COLLOQUIA COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING; 2019 FALL BOARD

POLICY

The future of the profession is with our students and those who train them Hence, the Institute annually sponsors a set of colloquia for students and for new faculty. All relevant academic departments are invited to nominate participants for each colloquium.

PROCEDURES

Membership

The Committee shall consist of an overall Combined Colloquia Chair, as well as t w o c o - chairs for each of the individual colloquium who report to the Combined Colloquia Chair. The Combined Colloquia Chair shall serve a two-year term, and the individual colloquium chairs will each serve two-year, staggered terms. The Combined Colloquia Chair shall be appointed by the Vice President of Education with the approval of the Board. The individual colloquia co- chairs shall be appointed by the Combined Colloquia Chair with the approval of the Vice President of Education. If desired, the Combined Colloquia Chair may appoint additional members of the committee with approval of the Vice President of Education. Chairs and members will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable.

Functions

The Combined Colloquia Committee is responsible for putting on these colloquia. Unless otherwise approved by the Board, all of these colloquia take place immediately preceding the start of the INFORMS annual meeting. While admission to these colloquia is handled separately, there may be joint meals and plenary presentations.

Relation to the Board

The Committee is part of the Education Group cluster of committees, which reports to the Board through the Vice President of Education. Reporting is by written reports submitted to the Vice President of Education at least one month prior to the INFORMS annual meeting.

Procedural Notes

- The Combined Colloquia Chair is a member of the local organizing committee for the annual meeting. It is recommended that the individual chairs also be invited to serve on this organizing committee.
- 2. The colloquia should be held at the main conference hotel if affordable rooms can be assured.
- 3. If possible, the appointed Colloquia Chairs should attend the prior year's Colloquia.
- 4. Relevant INFORMS subdivisions, fora, and committees should be consulted in the selection of chairs for individual colloquia (e.g. The Committee on Teaching and Learning should be consulted about teaching colloquia, JFIG should be consulted about colloquia for new faculty, etc.)
- 5. It is important to advertise the Combined Colloquia in OR/MS Today, and to send announcements and applications to all OR/MS Ph.D.-granting programs, all OR/MS academic units, and student chapters.

- 6. Invitation to professional participants (e.g. faculty) should be made early enough that teaching replacements can be found to allow them to attend.
- 7. Pricing per student and per faculty member for the colloquia will be determined based on the colloquia costs. It is expected that student pricing will be lower than faculty pricing.
- 8. Significant changes to the colloquia content, structure, or pricing should be submitted for approval to the Education Strategy Committee.

Review

The Education Strategy Committee will review the committee's work periodically, but not less than once every four years, to determine whether the P&P and the committee are still aligned and continuing to benefit INFORMS and our members.

RELATED DOCUMENTS:

INFORMS Policies and Procedures Manual, Section 2.1 General Committee Procedures INFORMS Policies and Procedures Manual, Section 11.7 Student Affairs Committee

NUMBER 18.5 EDUCATION PROGRAMS' DATABASE COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

POLICY

The Academic Programs' Database Committee overseas the database of OR/MS and analytics-related degree programs offered in academia. The database was created to be used by potential students researching degree programs, faculty directing or considering establishing a related degree program, and recruiters looking for degree programs that meet their needs. The data in the database is entered and updated by participating universities. The Committee's purpose is to:

- 1) advise INFORMS on ways to continue to increase the value of the database for members,
- 2) raise awareness of the database to attract new users,
- 3) develop relevant supporting content related to academic programs, and
- 4) advise INFORMS on the addition of functions or data requirements for the Database to meet the evolving needs of the INFORMS Education community.

PROCEDURES

Membership

The committee shall consist of a chair and four additional members. All members, including the chair, shall serve for a 2-year term with the possibility of reappointment for an additional term. New members will be appointed annually to stagger the terms and provide continuity. The chair shall be appointed by the Vice President of Education with the approval of the Board. Two members should be appointed by the chair of the University Analytics Programs' Committee, with the remaining members appointed by the committee chair, all with the approval of the Vice President of Education. Officers and members will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable. INFORMS staff members, appointed by the Director of Information Technology and the Director of Education and Industry Outreach, shall serve as *ex officio* members of the committee.

Relation to the Board

The Academic Programs' Database Committee is part of the Education Group cluster of committees, which reports to the Board through the Vice President of Education. Reporting is by written reports submitted to the Vice President of Education at least one month prior to the INFORMS annual meeting. It is expected that the Academic Programs' Database Committee reports regularly to the Education Strategy Committee.

Meetings

The committee will meet as needed throughout the year, primarily by teleconference, but also in person as needed at one or more of the INFORMS meetings.

NUMBER 18.5 EDUCATION PROGRAMS' DATABASE COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD MEETING

Review

The Education Strategy Committee will review the committee's work periodically, but not less than once every four years, to determine whether the P&P and the committee are still aligned and continuing to benefit INFORMS and our members.

RELATED DOCUMENTS:

INFORMS Policies and Procedures Manual, Section 2.1 General Committee Procedures

NUMBER 18.6 UNIVERSITY ANALYTICS PROGRAMS' COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD; 2019 SUMMER BOARD

POLICY

The University Analytics Programs' Committee brings together representatives of analytics programs on the undergraduate and graduate level. The goals of the committee are to provide systemization and guidance both to newly forming and established analytics programs, and to provide a forum that will allow program representatives to learn from one another.

PROCEDURES

Membership

The committee shall consist of a chair, two vice chairs, and a representative from all interested undergraduate and graduate analytics' programs. All officers shall serve for a 2-year term with the possibility of reappointment for an additional term. Appointments will be made annually to stagger the terms and provide continuity. Officers will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable. The chair shall be appointed by the Vice President of Education with the approval of the Board. The vice chairs will be chosen by the committee chair with the approval of the Vice President of Education. The committee may establish subcommittees, one of which is a standing committee responsible for organizing the annual event of the Meeting of Analytics Program Directors (MAPD). The University Analytics Programs' Committee Chair, with input from the Vice President of Education, shall appoint the chairs of established subcommittees.

Functions

The committee will address important aspects of university analytics programs:

- 1. Share ideas and information across institutions
- 2. Document information and resources
- 3. Compare enrollment data, faculty numbers, and metrics
- 4. Create an awareness of the types of programs being developed and offered
- 5. Develop curriculum metrics and benchmarking data that can be shared
- 6. Be a resource for institutions whose administrators have expressed an interest in analytics education programs and for those that have decided to start an analytics education program
- 7. Create linkages with industry and opportunities to share information and needs
- 8. Organize and oversee an annual MAPD event at the annual, spring Business Analytics Meeting

Relation to the Board

The University Analytics Programs' Committee is part of the Education Group cluster of committees, which reports to the Board through the Vice President of Education. Reporting is by written reports submitted to the Vice President of Education at least one month prior to the INFORMS annual meeting. It is expected that the University Analytics Programs' Committee reports regularly to the Education Strategy Committee.

Meetings

The committee will meet regularly by teleconference and at least once in person annually, usually at the INFORMS annual meeting.

NUMBER 18.6 UNIVERSITY ANALYTICS PROGRAMS' COMMITTEE

EFFECTIVE: 2017 SUMMER BOARD; 2019 SUMMER BOARD

Review

The Education Strategy Committee will review the committee's work periodically, but not less than once every four years, to determine whether the P&P and the committee are still aligned and continuing to benefit INFORMS and our members.

RELATED DOCUMENTS:

INFORMS Policies and Procedures Manual, Section 2.1 General Committee Procedures

NUMBER 18.7 COMMITTEE ON TEACHING AND LEARNING

EFFECTIVE: 2017 SUMMER BOARD MEETING

POLICY

The Committee on Teaching and Learning brings together individuals interested in the teaching and learning of OR/MS and analytics in all settings and at all educational levels. The goals of the committee are to develop strategies and structures that will allow instructors to network and learn from one another. Additionally, the Committee will facilitate volunteer efforts to support INFORMS education activities.

PROCEDURES

Membership

The committee shall consist of a chair, two vice chairs, and any other INFORMS member who expresses interest in the teaching and learning of OR/MS and analytics. All officers shall serve for a 2-year term with the possibility of reappointment for an additional term. Appointments will be made annually to stagger the terms and provide continuity. The chair shall be appointed by the Vice President of Education with approval of the Board. The vice chairs will be chosen by the chair with the approval of the Vice President of Education. The committee may establish subcommittees. The committee chair, with input from the Vice President of Education, shall appoint the chairs of established subcommittees. Officers will be considered and selected based on their expertise and experience and with an awareness that diversity of background and thought is invaluable. The chair, vice-chairs, and any chairs of established subcommittees will be the decision-making body of the committee.

Functions

The committee will address important aspects of teaching and learning in OR/MS:

- 1. Promote sharing and dissemination of resources that support effective teaching of OR/MS and analytics, including by organizing sessions at INFORMS conferences.
- 2. Coordinate with other INFORMS committees, particularly the Education Strategy Committee and the Education Outreach Committee to provide volunteer support for INFORMS education activities.
- 3. Support the development of effective teaching of new and continuing faculty through activities such as the Teaching Effectiveness Colloquium and coordination with the Combined Colloquia Committee.
- 4. Provide a mechanism for the involvement of all INFORMS members interested in effective teaching of OR/MS and analytics.

Relation to the Board

The Committee on Teaching and Learning is part of the Education Group cluster of committees, which reports to the Board through the Vice President of Education. Reporting is by written reports submitted to the Vice President of Education at least one month prior to the INFORMS annual meeting. It is expected that the Committee on Teaching and Learning reports regularly to the Education Strategy Committee.

Meetings

The committee will meet at each INFORMS annual meeting. Other meetings will take place as needed via teleconference and e-mail communication.

NUMBER 18.7 COMMITTEE ON TEACHING AND LEARNING

EFFECTIVE: 2017 SUMMER BOARD MEETING

Review

The Education Strategy Committee will review the committee's work periodically, but not less than once every four years, to determine whether the P&P and the committee are still aligned and continuing to benefit INFORMS and our members.

RELATED DOCUMENTS:

INFORMS Policies and Procedures Manual, Section 2.1 General Committee Procedures