New Jersey Institute of Technology

Institute for Teaching Excellence

Second Year (AY 2016 – 2017) Activities

A Report to the Martinson Family Foundation

July 2017

Introduction
During its second year, The Institute for Teaching Excellence (ITE) built on last year's success by continuing to offer many of the initiatives introduced during the inaugural year as well as launching new offerings consistent with its mission, which is to promote the use of state-of-the-art pedagogical and technological methods in teaching. This report summarizes the ITE activities during the 2016 – 2017 academic year.

ITE Organization/Structure
Dr. Basil Baltzis continued in his role of director, presiding over the ITE Executive Committee. In addition to its chair, the Executive Committee has five members from across NJIT. The Committee met monthly during the fall and spring semesters to plan and support the programs and events.

ITE Executive Committee Membership For AY 2016 2017:
- Basil C. Baltzis, Vice Provost for Academic Affairs, and Director of Institute for Teaching Excellence
- Bruce Bukiet, Associate Dean of College of Science and Liberal Arts
- Charles Brooks, Executive Director, Office of Institutional Effectiveness
- John Carpinelli, Professor of Electrical and Computer Engineering
- Blake Haggerty, Executive Director, Digital Learning and Technology Support
- Ronald Rockland, Professor of Engineering Technology

Four of the ITE Executive Committee members (Baltzis, Bukiet, Carpinelli, and Rockland) are Master Teachers (which is the highest distinction NJIT bestows upon members of its faculty) who have a sustained record of teaching excellence and have been recognized with awards from both inside and outside NJIT. The Master Teacher designation started at NJIT in 2000.

In September 2016, NJIT had a total of 32 Master Teachers, 27 of whom served as ITE Fellows. ITE Fellows are appointed for two-year periods and the difference from last year's report is because of the naming of three new Master Teachers in September 2016, all of whom accepted an invitation to serve as NJIT Fellows. As in the previous year, three university lecturers also served as ITE Fellows, bringing the total number of fellows to 30. During the year reported here, 24 of the 30 fellows volunteered and served in various programs.

ITE Facilities
In January of 2017, the ITE headquarters moved from their temporary home in 105 Cullimore Hall to the newly renovated Central King Building (CKB) suite G15. This new facility features space for a faculty director and instructional designers. The ITE Office also features video conferencing capability, classroom technology, and examples of the furniture designed to support active learning. This is the same equipment and furniture found in the CKB classrooms so that faculty can drop-in and get experience using the tools they will find in the classroom. A common area also exists in the main entrance for informal gatherings of faculty and ITE support staff. Instructional designers are staffed full-time during regular university business hours to provide faculty the opportunity to receive one-on-one consultations in the pursuit of teaching.

ITE Activities for the 2016-2017 Year

During its second year of operation, ITE instituted and ran the following programs:
1. Lectures by External Speakers
2. New Faculty Development Workshop
3. ITE/Library Open and Affordable Textbook Initiative*
4. "Lunch at ITE"
5. September, January, and May, Workshop for Faculty and Instructional Staff
6. Focus Group on Determining the Educational Value of a Course
7. Best Practices in Digital Learning (Online Course)*
8. Adjunct Reception*
9. Support for Active Learning Professional Development*
10. One-on-One Mentoring Program

*New offerings for the 2016-17 year.

Each one of the aforementioned programs is described in detail below.

1. Lectures by External Speakers

Through this program, ITE brings external speakers to campus that are nationally recognized for their work in higher education. During the 2016-2017 academic year, two external speakers came to campus.

- On January 27, 2017, Dr. Laurie McNeil from the University of North Carolina at Chapel Hill presented, "Learning by Doing Rather than Teaching by Telling - Teaching Your Students the Way You Actually Learn." Dr. McNeil is a Distinguished Professor of Science and is one of the foremost experts on the concepts of active learning in teaching. In a traditional lecture-based classroom, the instructor presents information and the students then attempt to apply that information to specific situations (frequently in homework when they are on their own). Active learning reverses this model. The information transfer takes place outside of class, and class time is used for the students to work collaboratively as they engage in hands-on, minds-on application of the information while the instructor provides support.

  Dr. McNeil presented in the new SCALE-UP classroom, part of the newly renovated Central King Building. The SCALE-UP classroom is a state-of-the-art active learning environment. Attendees were given hands-on examples of how to engage with their students in such environments and faculty were encouraged to try new ways of teaching in their classrooms.

  Dr. McNeil's presentation was attended by 53 faculty and instructional staff. For the Fall 2017 semester, 11 faculty are scheduled to teach 12 sections utilizing active learning techniques in the new SCALE-UP classroom.

  A video of Dr. McNeil's presentation can be found on YouTube:
  https://www.youtube.com/watch?v=MCrr6oFBm4o

- Dr. Carolyn Sealfon, former Associate Director of Science Education at Princeton University, led a talk on April 24th regarding Princeton Science Teaching methods. Dr.

Sealfon spoke to NJIT faculty about methods that she taught to Princeton University science faculty over a number of years. She emphasized how to increase student success, maintain high standards of rigorous learning, and make more efficient use of instructional resources, such as faculty time and teaching assistants.

Dr. Sealfon's discussion was attended by 35 faculty and instructional staff.

2. New Faculty Development Workshop

During the Fall 2016 semester, the workshop first introduced in the previous year was offered to the 15 tenure-track faculty members who joined NJIT in September 2016. The detailed schedule of the 9-week program is shown in Appendix I. There were two main differences in the workshop from the previous year. The first is the addition (during week 8) of information regarding library resources (especially digital) presented by the liaison librarians; there is one librarian who liaises each of the five degree-granting NJIT colleges with the library. The second was a change in running the workshop; namely, instead of having the same faculty groups throughout the workshop, the group membership changed every three weeks to allow new faculty to better know all members of their cohort. Attendance was extremely good with some faculty missing a session due to travel to professional meetings to present papers. ITE was fully responsible for running the first three sessions of the workshop, providing mentors and a facilitator from the group of ITE Fellows. Analysis of survey results indicate a very high degree of satisfaction among the attendees. Many of them suggested the workshop should run before the semester starts, as much of the information on both teaching and grant writing could be used by the attendees from their first day on campus. This is a good suggestion but presents difficulties as employment does not start before September 1st.

2. ITE/Library Open and Affordable Textbook Initiative

In the Spring 2017 semester, the Van Houten Library and the Office of Digital Learning with collaboration and support from the Institute of Teaching Excellence and the Office of the Provost launched an Open and Affordable Textbook Initiative to help reduce the costs of textbooks for students and to encourage faculty to redesign their courses using low-cost teaching materials. Open educational resources (OER) are materials that have been published under an open license, granting faculty permission to freely and legally use them.

As part of this initiative, twelve $1,000 grants have been awarded to faculty who submitted proposals for the 2017-18 academic year and plan to reduce the cost of textbooks by incorporating OERs or low-cost teaching materials into their courses. NJIT estimates this will save students over $150,000 in the 2017-2018 academic year.

Instructional Designers and University Librarians have worked closely with many of the recipients to identify, vet, and incorporate these open educational resources into their courses. Strategies for implementing OERs were discussed at ITE events throughout the year and will continue to be explored during the upcoming year.

More information about the Open and Affordable Textbook Initiative can be viewed here: http://library.njit.edu/oat/

3. "Lunch at ITE"

ITE continued the popular "Lunch at ITE" program that was introduced last year. The ITE lunches are informal discussions of teaching-related topics. Faculty, university lecturers, and adjunct instructors are invited to bring their lunch and join in a discussion on teaching at the ITE headquarters. Light refreshments are provided by ITE. These meetings initiated in September 2016 and ran through the end of the spring 2017 semester; participants could attend as many meetings as they wanted. There were a total of 23 lunch events (all of them running on Tuesdays from 12:00pm-1:00pm) attended by a total of 228 faculty. For each meeting, an ITE Fellow, ITE Executive Committee member, or faculty member selected by the ITE director acted as the facilitator of a discussion on a selected topic. The schedule of the lunches are included as Appendix II of this report. The venue for this program was the ITE Office at Cullimore 105 in Fall 2016 and was moved to the new office suite in the Central King Building G15 in Spring 2017. The intent is to have a small group of participants in order to encourage discussion and even debate of ideas. ITE plans to continue this program during the 2017- 2018 academic year.

4. September, January, and May Workshops for Faculty and Instructional Staff

Last year NJIT transitioned the Faculty Teaching, Learning, and Technology Institute series to an ITE supported endeavor. This continued for the 2016-2017 academic year. The ITE Workshops were one-day events in which faculty and instructional staff presented on issues related to pedagogy and technology in education. The workshops were separated into two tracks. One track featured invited faculty and the other track were led by Instructional Designers.

These workshops ran in September, January, and May this past year. All faculty, university lecturers, and adjuncts were invited. In total, 43 individuals (faculty, university lecturers, and adjuncts) attended the September workshop, 42 attended in January, and 30 attended in May. In total, 86 unique faculty teaching 366 sections attended one of these workshops last year.

The schedules for the workshops are included as Appendix III of this report.

5. Focus Groups on Determining the Educational Value of a Course

On April 5, 2017, two members of the ITE Executive Committee (Dr. Ron Rockland and Mr. Blake Haggerty) conducted a focus group of students that explored what factors they consider when evaluating the educational value of a course.

Each semester students are asked to complete course evaluation forms. One question asks them to rate the "Overall Educational Value of a Course." To ensure degree programs meet the needs of students and as part of our curricular assessment and reform efforts, the focus group was conducted to learn more about how students define educational value and what impacts (both positively and negatively) that perception.

Among some of the key findings of the event is that the question about educational value on the course evaluation form is not meaningful as it is currently written because it is too difficult at the end of the semester for students to separate the educational value of a course from the instructor's delivery and teaching style. Students also confirmed that the educational value of a course is tied to attaining a future career in their field, but that those connections to future careers are not immediately apparent.

The event was attended more than 25 faculty, university lecturers, adjunct faculty, and staff members.

A recording of the event is available as a private YouTube link and has been shared with select NJIT staff: https://youtu.be/O5wkvr28rLQ

6. Best Practices in Digital Learning Course
In March 2017, the Office of Digital Learning with support from ITE launched a "Best Practices in Digital Learning" online course for faculty to better understand how to develop online course materials. This asynchronous course was done completely online and allowed faculty to take on the role of a student in the digital learning environment. Participants were asked to create their own online unit of instruction and were provided with guidance and suggestions from Instructional Designers.

A total of 12 faculty signed up for the course and ITE plans to run the course again during the 2017-2018 academic year.

7. Adjunct Reception
On January 11, 2017, the ITE hosted a reception for NJIT adjuncts. This reception was designed to make adjuncts feel like part of the community and to provide them with an overview of teaching resources and methodologies available in support of instruction. The event was held in the evening and light refreshments were served.

The event was attended by 12 adjuncts, most of whom would be teaching at NJIT for the first time. Presentations were given by members of the ITE Executive Committee and the Office of Digital Learning. Informal networking and discussions took place before and after the event. The agenda for the evening is included as Appendix IV of this report.

8. Support for Active Learning Professional Development
In January NJIT opened the first 90 seat SCALE-UP classroom in the newly renovated Central King building. SCALE-UP stands for "Student-Centered Active Learning Environment with Upside-down Pedagogies." This space is used to promote active learning in classes with larger enrollment. The design of the space is intended to facilitate student collaboration. ITE promoted the use of the space when it was launched with Dr. Laurie McNeil for the January speaker series.

Additionally, ITE sponsored submissions for faculty interested in using SCALE-UP to attend a conference to learn more about the use of the space. Faculty applied in the spring of 2017. Dr. Melodi Guilbault (School of Management) and Dr. Maria Stanko (Biology) were selected to attend The International Forum on Active Learning Classrooms in August of 2017 at the University of Minnesota. Dr. Mary Konsolaki (Biology) was selected to attend a to-be-determined conference in the fall. These faculty will then present what they learned and how they incorporated active learning into their classes at ITE events throughout the next year.

Information on the International Forum on Active Learning Classrooms conference can be found here: https://cceevents.umn.edu/international-forum-on-active-learning-classrooms

9. One-on-One Mentoring
The ITE continued the one-one-mentoring program that started in year one. Through this program, ITE pairs an interested faculty member or university lecturer (mentee) with an ITE Fellow (mentor) for the purpose of facilitating the mentee's efforts to become more familiar with state-of-the-art pedagogical approaches as well as strategies for increasing student engagement, and to improve his/her instructional delivery. The use of technology to improve course content delivery and communication with students is a key aspect of the mentor/mentee interaction.

The mentor-mentee pairs are arranged by the ITE Director who keeps them confidential. It is also important to note that the mentor and mentee are from different academic departments to prevent any conflict of interest during the promotion and tenure process; this approach also ensures that the mentor-mentee interaction focusses on teaching strategies rather than the content of the curriculum.

Other ITE Activities
- The ITE website was designed and launched in Fall 2016. The new website features information on ITE activities and initiatives that have taken place, as well as information on upcoming events. The ITE website also features artifacts, presentations, and videos of past events for on-demand access to visitors. The weblink to the ITE website can be found here: https://www.njit.edu/ite/

- Last year ITE, working with the Teaching, Learning, and Technology (TLT) Committee, developed a Quality Assurance in eLearning rubric that provides guidance on standards for designing a quality online course. The committee, led by Dr. Ron Rockland and Mr. Blake Haggerty, passed a motion, forwarded to the NJIT Faculty Senate, recommending the following: "For any new online course development, self-evaluation will be done by the instructor and ITE using the Quality Assurance in elearning rubric to ensure quality." This rubric will help to provide guidance in the creation of new and significantly revised quality online courses. A copy of this rubric can be found in Appendix V.

- The Office of Digital Learning with ITE support also submitted an online course (HSS 408 taught by Dr. Jim Lipuma) for a peer review by Quality Matters. Quality Matters is a nationally recognized organization that works in the pursuit of ensuring the highest of standards in excellence in online course design. This course was reviewed by Quality Matters reviewers and became a certified Quality Matters course. This is the first course to go through this process at NJIT.

- Last year the instructional designers assisted 25 faculty members in the significant revisions of their course materials. Next year the faculty that visit the ITE office will be tracked via a sign-in method to provide more extensive visitor logs.

Plans for the Third Year
ITE plans to continue many of the initiatives as described above.

Dr. Basil Baltzis will continue as the Director of the ITE and Dr. John Carpinelli will step into the role of Associate Director of ITE for the 2017-2018 academic year. Dr. Carpinelli will take a leadership role in expanding and growing ITE initiatives. Some topics of interest are:
- Creating a syllabus template for all NJIT faculty;
- Improving the teacher education training available for teaching assistants;
- Modifying ITE lunches to have follow-up conversations on the topics discussed and how they were incorporated into the classroom; and
- The introduction of a new program which is tentatively called "Innovations Across the Curriculum." In this program, we will identify known strategies to improve student performance and have faculty volunteers introduce them into their courses. The courses would be at various levels, ranging from freshman through graduate level, and across as many disciplines as possible. The innovation will be assessed and evaluated based upon the impact on student outcomes, which would be built into the project from the beginning. If the necessary data from previous semesters is available, we could also compare student performance on equivalent tests in previous semesters against student performance with study guides.

Conclusion

ITE pursuits have grown and expanded in the second year. ITE has established its presence, is recognized by the NJIT community, and is poised to have an instrumental role in NJIT's efforts to excel in the changing landscape of higher education. ITE is grateful to the Martinson Family Foundation for its support.

Appendix I- New Faculty Development Workshop
Academic Year 2016 – 2017

Dates: Specified below

Time: 4:30 p.m. – 7:00 p.m. (includes working dinner served at about 6:00 p.m.)

Place: 112 Eberhardt Hall [Except Thursday, October 20, 2016: Ballroom B]

Total number of sessions: 9

Maximum Number of Attendees: 20

Attendees are placed in groups of 3 or 4 and each group has a mentor (Distinguished Professor, Master Teacher, etc.).

Each session has typically three time slots.
  Slot-1: Interactive Talk
  Slot-2: Brainstorming/Mentoring (Round Table: 3 - 4 attendees and one mentor)
  Slot-3: Case-Study Presentations

The workshop has three themes; each theme runs for 3 weeks (3 sessions)
  Effective Teaching
  Successful Grant Funding
  Professional Service & Tenure

Week-1:   **Tuesday, September 13, 2016**

Theme: **Effective Teaching: Student Engagement**

- Interactive Talk Topical Coverage
    o Student Engagement in Class
    o Avoiding Stereotypes
    o Interactive Conversation
    o Student Groups and their Formation
    o Student Responsiveness
    o Oral Communication Styles
    o On the Go Assessment
    o Adjusting the Classroom Delivery
- Brainstorming:
    o Case Study: Individual Issues
    o Discussion with Mentors
    o Formulation of Solutions and Best Practices
- Case Study Presentations
    o Group Presentations
    o Discussion on Solutions and Best Practices
- Speakers:
    o Master Teachers
    o Distinguished Professors who are also Master Teachers

Week-2:   **Tuesday, September 20, 2016**

Theme: **Effective Teaching: Classroom Material**

- Interactive Talk Topical Coverage
    - Setting up Learning Goals
    - Material/Notes Distribution Before the Class
    - Reading Assignments
    - Interactive Discussion
    - Demo Material in the Class: Working through examples
    - In-Class Assessment
    - Cooperative and Peer-Learning
- Brainstorming:
    - Case Study: Individual Issues
    - Discussion with Mentors
    - Formulation of Solutions and Best Practices
- Case Study Presentations
    - Group Presentations
    - Discussion on Solutions and Best Practices
- Speakers:
    - Master Teachers
    - Distinguished Professors who are also Master Teachers

Week-3:   **Tuesday, September 27, 2016**

Theme: Effective Teaching: Assignments, Assessment and Outside Classroom Activities

- Interactive Talk Topical Coverage
    - In-Class Assignments
    - Discussion on Assignments and Solutions
    - Assessment of Learning Goals
    - Outside Classroom Follow-ups
    - Group Projects and Individual Responsibility
    - Final Exams
    - Grading and Learning Goals
- Brainstorming:
    - Case Study: Individual Issues
    - Discussion with Mentors
    - Formulation of Solutions and Best Practices
- Case Study Presentations
    - Group Presentations
    - Discussion on Solutions and Best Practices
- Speakers:
    - Master Teachers
    - Distinguished Professors who are also Master Teachers

Week-4:   **Thursday, October 13, 2016**

Theme: **Successful Grant Funding: Proposal Preparation**

- Interactive Talk Topical Coverage
  - Federal Funding Resources
  - Federal Proposal Format Requirements
  - Different Proposal Formats: NSF/NIH/DoD/ONR/NASA
  - Special Programs/RFP/BAA
  - Main Proposal Preparation
  - Most Common Mistakes and Errors
  - Available Resources in the Office of Research
- Brainstorming:
  - Case Study: Sample Proposal
  - Discussion with Mentors
  - Formulation of Solutions and Best Practices
- Case Study Presentations
  - Group Presentations
  - Discussion on Solutions and Best Practices
- Speakers:
  - Distinguished Professors
  - Researchers/Directors

Week-5: **Thursday, October 20, 2016**

Theme: **Successful Grant Funding: Budget Preparation and Submission**

- Interactive Talk Topical Coverage
  - Federal Budget Templates
  - Budget Preparation Format and Requirements
  - NJIT and Agency Policies
  - Budget Adjustments at Award
  - Most Common Mistakes and Errors
  - Final Submission: Guidelines and Error Check
- Brainstorming:
  - Case Study: Sample Budget and Proposal
  - Discussion with Mentors
  - Formulation of Solutions and Best Practices
- Case Study Presentations
  - Group Presentations
  - Discussion on Solutions and Best Practices
- Speakers:
  - Distinguished Professors
  - Researchers/Directors

Week-6: **Tuesday, November 1, 2016**

Theme: **Successful Grant Funding: Proposal Review and Funding**

- Interactive Talk Topical Coverage
  - Review Protocol and Proposal Format
  - Review Processes: Different Agencies

- o Review Criterion: Different Agencies
- o Funding Processes: Different Agencies
- o Most Common Mistakes and Errors
- o Sample Proposal Review Formats and Scores
- Brainstorming:
  - o Case Study: Sample Proposal and Reviews
  - o Discussion with Mentors
  - o Formulation of Solutions and Best Practices
- Case Study Presentations
  - o Group Presentations
  - o Discussion on Solutions and Best Practices
- Speakers:
  - o Distinguished Professors
  - o Researchers/Directors

Week-7:   **Monday, November 7, 2016**

Theme: **Professional Service & Tenure: Professional Societies**

- Interactive Talk Topical Coverage
  - o Professional Service Opportunities and Protocols
  - o Reviewers for Journal and Editorial Board
  - o Conference Organization
  - o Review Panels for Federal Funding Agencies
  - o Most Common Perceptions
- Brainstorming:
  - o Case Study: Sample Opportunities
  - o Discussion with Mentors
  - o Formulation of Solutions and Best Practices
- Case Study Presentations
  - o Group Presentations
  - o Discussion on Solutions and Best Practices
- Speakers:
  - o Distinguished Professors
  - o Senior Professors/Editors/Conference Chairs

Week-8:   **Tuesday, November 15, 2016**

Theme: **Professional Service & Tenure: Scholarly Publications**

- Interactive Talk Topical Coverage
  - o Publishing Papers in Journals vs Conferences
  - o Where to Publish? Impact Factor
  - o Citation Index
  - o Systematic Tracking of the Impact of One's Work (**Presentation by Liaison Librarians**)
  - o Emerging as an Expert in the Field
  - o What is important for Tenure Consideration?
  - o Most Common Perceptions
- Brainstorming:
  - o Case Study: Sample Tenure Guidelines
  - o Discussion with Mentors

- o   Formulation of Solutions and Best Practices
- Case Study Presentations
  - o   Group Presentations
  - o   Discussion on Solutions and Best Practices
- Speakers:
  - o   Distinguished Professors
  - o   Senior Professors/Editors/Conference Chairs

Week-9:   **Tuesday, November 22, 2016**

Theme: **Professional Service & Tenure: Tenure Considerations**

- Interactive Talk Topical Coverage
  - o   Tenure Process
  - o   Resume Preparation
  - o   Emerging as an Expert in the Field for Tenure Consideration
  - o   Reference Network
  - o   Grants and Collaborative Funding
  - o   Publications and Citation Index
  - o   Sample Dossiers
  - o   Most Common Perceptions
- Brainstorming:
  - o   Case Study: Sample Dossiers and Tenure Consideration
  - o   Discussion with Mentors
  - o   Formulation of Solutions and Best Practices
- Case Study Presentations
  - o   Group Presentations
  - o   Discussion on Solutions and Best Practices
- Speakers:
  - o   Distinguished Professors
  - o   Senior Professors/Prior University P&T Committee Members

Appendix II - Lunch at ITE Schedule 16-17 Academic Year

1. September 20, 2016: "*The Importance of Teaching Information Literacy?*" Matthew Adams
2. September 27 2016: "*The Gateway Project: Helping new NJIT succeed.*"
3. Gordon Thomas
4. October 4, 2016: "*Research to teaching transition hiccups for tenure-track faculty: How to overcome them*" Sagnik Basuray
5. October 11, 2016: "*Fostering Critical Reading Skills in your Discipline*" Megan O'Neil
6. October 18, 2016: "*Embedding Information Literacy into a Course*" Melodi Guilbault
7. October 25, 2016: "*John Biggs' theory of Constructive Alignment: Teaching Approaches to increase Student Learning*" Basil Baltzis
8. November 1, 2016: "*Assessing Individual Performance within a Group Setting*" Ron Rockland
9. November 8, 2016: "*Student Group Projects: Group Effectiveness, Communication and Leadership*" Raj Sodhi
10. November 15, 2016: "*Teaching and Transparency: Building and Maintaining Student Trust*" Kyle Riismandel
11. November 29, 2016: "*Technology Tools for Teaching and Student Engagement*" Padma Natarajan
12. December 6, 2016: "*Knowledge, Critical Thinking and Curiosity*" Xianqin Wang

13. January 24, 2017: "*Professional Development for Students Inside and Outside of the Classroom*" Alison Lefkovitz
14. January 31, 2017: "*Mentoring Undergraduates in Research*" David Horntrop
15. February 7, 2017: "*Improving Student Presentations through Peer Critiques*" Regina Collins
16. February 14, 2017: "*Reverse Engineering Inspires Freshmen Mechanical Engineering Students*" Balraj Mani
17. February 21, 2017: "*I Contain Multitudes: The Art and Challenges of Teaching at Scale*" Barry Cohen
18. February 28, 2017: "*Engaging the Adult Learner: A Discussion on Teaching Strategies and Technology*" Michael Koskinen
19. March 7, 2017: "*Lectures are Not Dead: Effective Strategies for Excellent Lectures*" Ecevit Bilgili
20. March 21, 2017: "*Helping Underprepared Students Succeed at NJIT*", Ashish Borgaonkar
21. April 4, 2017: "*Experiences with Group Learning Activities: Benefits and Challenges*" Laurent Simon
22. April 11, 2017: "*Designing and Teaching a Graduate Course Based on Current Research*" Ed Dreizin
23. April 18, 2017: "*Integrating Undergraduates into Research Productively*" Tara Alvarez
24. April 26 (Wednesday), 2017: "*Teaching a Course in a Classroom and On-Line: Lessons Learned*" Ron Rockland

Appendix III - ITE Workshop Schedules

September 1, 2016 Workshop

8:30 - 9:00	**Registration, Breakfast, and Introductions** (*GITC 3710*)	
9:00 - 10:00	**General Session: Addressing the Variety of Learning Styles in the Classroom** Students have different learning styles, characteristic strengths and preferences in the way they take in and process information. This session introduces learning styles and strategies instructors can use to present material so students can learn in their most effective way. Participants will take an online Myers-Briggs Type Indicator test to determine their own learning styles. Dr. John Carpinelli (*GITC 3710*)	
10:00 - 11:00	**Technology Enhanced Pedagogy** There is a wealth of technologies available that can be used in the classroom. However, using technology without a relationship to enhancing pedagogy, and therefore enhancing student learning, is a poor decision. This workshop will cover several technologies that are available at NJIT, and demonstrate how they have been used in a face to face class to improve student learning. Dr. Ron Rockland (*GITC 3710*)	**Best Practices for Online Instruction** Teaching online has a different set of challenges than the face-to-face classroom. This session will discuss strategies and best practices for facilitating asynchronous online learning. Mike Koskinen (*GITC 2302*)

11:00 - 12:00	**The Challenges of Introducing Novel Applications in an Existing Course** The rapid pace of technological advances in engineering makes it difficult for faculty members to include relevant applications in a four-year curriculum. While such efforts have merit, they may aggravate an already precarious student retention program, if not handled properly. The indiscriminate addition of topics into a course is sometimes achieved at the expense of fundamental knowledge. Eventually, core concepts and practices are not taught or properly reinforced in a manner that can help the students solve real-life problems. This presentation will examine these challenges and how they are treated in a Chemical Engineering course. Dr. Laurent Simon (*GITC 3710)*	**Digital Learning Potpourri** Learn about the various digital services the Office of Digital Learning has to offer. In this session we will discuss tools such as Moodle, Kaltura, Respondus, and more! We will also share resources for online course design and other instructional tools. Amanda Molina (*GITC 2302)*
12:00	Lunch: (*GITC 3710)*	
12:30 - 1:30	**Lunch Speaker - The Process and the Outcome: Linking Formative and Summative Assessment** The words "formative" and "summative" assessment are often used without a clear understanding of their meanings. This presentation will show how documenting and evaluating program implementation and management is necessary for accurately developing and interpreting program outcomes. Dr. Chuck Brooks *(GITC 3710)*	
1:30 - 2:30	**Insights into Transitioning a Face-to Face to an Online Class** If you have never taught an online class you may be wondering how to transition your face-face class to an online class. The presentation will highlight that the transition requires more than learning how to use the technology and loading the material into moodle. The presentation will focus on some areas that need to be considered to create an effective online class. One key point is to begin the course design process with the syllabus - so bring your syllabus with you. Dr. Melodi Guilbaut (GITC 3710)	**Strategies for Motivating Learners** 21st century learners, consisting of a mix of Gen X, Millenials, and iGeneration students are demanding a "student centered" approach to learning. In this session, we will discuss the evolving academic strategies and psychology in order to motivate this range of learners. Some of these strategies underpin tactics used in gamification, such as progressive scoring and digital badging, to using apps and social media to engage all learners. Jenna Corraro (*GITC 2302)*

2:30 - 3:30	**Your Course Is More Than Just the Material: Connecting Your Course to the World** So often, instructors approach a course as merely an effort to help students become proficient with the course material. However, the reason your class is part of a course sequence or curriculum indicates its larger connections. Furthermore, each degree or concentration connects to potential professions and life paths. In this presentation, we discuss how we have enlarged the context of a math course to engage students in reflecting on how the course content relates to principles that connect to students' majors, to their prospective careers and to issues that arise in the world around them. Dr. Bruce Bukiet (*GITC 3710*)	**Moodle Drop-In** Do you have a question about Moodle or are not sure exactly what it is and how it can be used? This session will cover both basic and advanced functions and tools in Moodle. We will also provide participants with an opportunity to get answers to their Moodle questions. Mike Koskinen, Jenna Corraro and Amanda Molina (*GITC 2302*)
3:30 - 4:30	**Closing Session: Academic Integrity Panel** Dr. Basil Baltzis, Dr. Marybeth Boger, Blake Haggerty, Dr. Laura Valente (*GITC 3710*)	
4:30	*Drawing for Prizes* (*GITC 3710*)	

January 12, 2017

8:30 - 9:00	**Registration, Breakfast, and Introductions** (*GITC 3710*)	
9:00 - 10:00	**Instructional Techniques for Today's Students** Dr. Matt Adams and Dr. Megan O'neill (*GITC 3710*)	
10:00 - 11:00	**Open Pathways to Student Success: Exploring Open and Affordable Textbooks Adoption at NJIT** The presentation will explore open educational resources (OER) and affordable textbooks adoption programs, potential implications of having primary instructional materials available to students at no or very low cost and potential partnerships and future directions. The session will also look for feedback as well as the framework necessary for assessing the impact of the OER and affordable textbook initiative. Ann Hoang and Blake Haggerty (*GITC 3710*)	**Using Kaltura for Instruction** Learn how to use Kaltura to support your course's digital media needs. Kaltura is a media repository fully integrated with Moodle. In addition to serving as a media repository, Kaltura offers opportunities for enhancing instruction by facilitating the creation and distribution of multimedia learning objects. This session will showcase desktop recording, integrating into Moodle, and sharing your videos with your class. Amanda Molina (*GITC 2302*)
11:00- 12:00	**The Gateway Project: Helping New NJIT Students Succeed** Representatives from Chemistry and Physics will discuss their collaboration with the Gardner Institute for Excellence in Undergraduate Education as well as recent changes made to Physics 102 as well as the	**What's New With You Moodle?** Have any questions pertaining to Moodle or are you new to Moodle? This session will go over new features of Moodle and introduce some of the basics. In addition we will also take specific faculty questions and provide hands on assistance.

	Freshman Chemistry Program in an effort to increase student success. Dr. Bhavani Balasubramanian and Dr. Ken Ahn *(GITC 3710)*	Michael Koskinen, Amanda Molina, Nikki Bosca *(GITC 2302)*
12:00	**Lunch** *(GITC 3710)*	
12:30- 1:30	**Lunch Session: Best Practices For Digital Learning** We will discuss strategies for effectively using digital learning tools to support face-to-face, online and converged learning. Emphasis will be placed on strategies for engaging students using asynchronous discussion, assessing students as well capturing and creating course materials. Blake Haggerty and Mike Koskinen *(GITC 3710)*	
1:30- 2:30	**Technology Tools for Teaching and Student Engagement** *Dr. Padma Natarajan (GITC 3710)*	
2:30- 3:30	**Leveraging ePortfolios Across the Curriculum** ePortfolios - digital showcases of student work - have been used by the Department of Humanities for program assessment since 2010. ePortfolios provide evidence of student mastery when evaluated against a rubric based on course and/or program learning goals. As digital repositories, ePortfolios can contain much more than student writing. From code samples (or links to Github) to mechanical engineering drawings, ePortfolios have the potential to become powerful assessment tools for program administrators as well as showpieces for students. This session will discuss the potential of ePortfolios to illustrate student mastery in a variety of STEM disciplines and will briefly introduce methods through which ePortfolios can be used for programmatic assessment. Dr. Regina Collins *(GITC 3710)*	**Creating Collaborative Spaces in the Classroom - How Students Can Teach Each Other Using Student-Generated Wikis** Collaborative work is essential for success in both educational and professional environments. Wikis are a popular method for collaborative projects and indirect, student-centered learning. This presentation will cover the educational uses of wikis in the classroom (specifically, how to use them in Moodle) and how they can be used to have students generate their own resources and participate in collaborative projects. *Nikki Bosca (GITC 2315)*
3:00- 4:00	**Central King Building - Designing for Student Success** This spring NJIT will unveil two new floors of the Central King Building. Aligned with NJIT's 2020 Vision, these spaces will provide students new new spaces that promote student interaction and collaboration. We will provide an overview of these facilities, including the open study spaces, converged classrooms, Scale-Up classroom, Writing Center, Institute for Teaching Excellence as well as the Math and Science Engagement Center. After the Drawing for Prizes we will have an option tour for anyone interested in seeing the new floors. *Dr. Kevin Belfield (GITC 3710)*	
4:00	**Drawing for Prizes** *(GITC 3710)*	

May 18, 2017

8:30 - 9:00	**Registration, Breakfast, and Introductions** *(CKB G-8 - Scale-up Classroom)*

9:00 - 10:00	**New Teaching Opportunities - Central King Building** Learn about the new capabilities available in the newly renovated CKB building. Topics covered will include using flexible furniture to support active learning, embracing a BYOD environment, teaching in a scale-up classroom and incorporating synchronous learning with new Converged classrooms. Blake Haggerty and Mike Koskinen *(CKB G-8 - Scale-up Classroom)*	
10:00 - 11:00	**Real-time Assessment of Student Learning using Tech Tools in Teaching** In this presentation, we will discuss how we take advantage of free technology tools to enhance the learning environment in our classrooms and increase student engagement. These tools would enable the instructor to gauge students' understanding in real time and adjust their teaching accordingly. Bruce Bukiet and Padma Natarajan *(CKB 116)*	**Creating Kaltura Quizzes and Interactive Moodle Activities** Engage and assess students with interactive video quizzing. Learn how to insert multiple choice questions at any point in a video you have created. The finished product can then be embedded into Moodle using the new H5P resource. Amanda Molina *(CKB G-8 - Scale-up Classroom)*
11:00-12:00	**Evolving an Online Course from a Face to Face Course** One way of developing an online course would be, over a period of time, evolving it from a face to face class. There are many differences, and a need to have a quantifiable measure of the structure of this course. We will discuss a possible structure using an NJIT rubric, the technologies in creating materials for this type of course, as well as some issues in evolving from a face to face course to an online course. Ron Rockland *(CKB 116)*	**Aligning your Moodle Course with Effective Syllabus Design** Whether you teach online or face-to-face and are using Moodle, an effectively designed syllabus should be the cornerstone of any course that guides students through the class. In conjunction with that, the Moodle course page should be a reflection of the syllabus and be designed to connect logically with the course schedule, acting as a supplementary guide through the course for students. This workshop will discuss best practices in syllabus design for both online and face-to-face courses. Participants will receive strategies for aligning their Moodle page with their course syllabus. Nikki Bosca *(CKB G-8 - Scale-up Classroom)*
12:00	**Lunch** *(CKB 116)*	
12:30-1:30	**Lunch with the CIO** A brief presentation by the NJIT Associate Provost for Information Services & Technology and Chief Information Officer about changes and improvements to IT Services for the upcoming year followed-up with an opportunity for general questions. David Ullman *(CKB 116)*	
1:30-2:30	**Maintaining Academic Integrity in the Digital Learning Environment** This session will explore strategies and tools that can be used to maintain academic integrity in the digital learning environment. We will also discuss academic integrity concerns as well as how to handle any potential violations. Some of the tools that will be discussed include Respondus Lockdown Browser, Respondus Monitor, Proctor U, Turnitin, Vocarium and Moodle logs/reports. Mike Koskinen and Blake Haggerty *(CKB 116)*	
2:30-3:30	**Gamifying an Online Oral Communications Capstone Course (Quality Matters Certified!)** The first course to be officially QM certified at NJIT. Join us in a discussion revolving around gamification	**Moodle: Open Ended-Topics** Have any questions pertaining to Moodle or are you new to Moodle? This session will go over new features and introduce some of the basics. In addition

	strategies to engage students in an online course. We will also talk about the QM certification process and how we can encourage more instructors to have their courses reviewed by QM. Jim Lipuma and Jenna Corraro *(CKB G-8 - Scale-up Classroom)*	we will also take specific faculty questions and provide hands on assistance. Jenna Corraro, Nikki Bosca, Amanda Molina, and Michael Koskinen *(CKB 116)*
3:30-4:30	**Assessing Individual Performance within a Group Setting** There are many reasons for students to be involved in a group. In courses that involve laboratory, students typically work with one or more other student as lab partners. In a capstone project, which is required by an accreditation agency such as ABET, students work together, both on the project, presentations and reports. In and out of class, students may have group projects or study. Teamwork is good, since it is a skill required by industry, since it happens in industry, and team study has been shown to be an effective way to enhance learning. However, there are aspects of teamwork that we need to consider, and they will be the main focus of this discussion. They are: ● Do we, or how should we, teach teamwork skills to our students? ● How do we form these teams? ● How do we assess performance of individuals within a team setting Ron Rockland *(CKB 116)*	
4:30	**Drawing for Prizes** *(CKB 116)*	

Appendix IV - Spring 2017 Adjunct Reception

Event: Spring 2017 Adjunct Reception

Date and Time: January 11, 2017 - 6:00 PM - 7:30 PM

Description: The Spring 2017 Adjunct Reception, sponsored by the Institute for Teaching Excellence, is an opportunity for NJIT adjuncts to learn more about the services that are available while engaging with the NJIT community. Adjunct faculty are encouraged to attend to network with members of the NJIT faculty and administration. Light refreshments will be served in this informal setting with opportunities to ask questions and gain valuable insight to teaching at NJIT.

Agenda
- Reception - Appetizers
- Welcome and Introductions
- NJIT Lecturers and Educators Congress (LEC) - The LEC represents Instructional Staff as part of shared governance at NJIT. Kyle Riismandel will discuss ways that adjuncts can participate in the LEC.
- Academic Expectations - Vice Provost for Academic Affairs Basil Baltzis will review expectations from faculty, including syllabi, midterm/final logistics, verification of presence and final grade entry.

- Office of Digital Learning and Library - Blake Haggerty will review the services available from the Office of Digital Learning as well as the Library and who to contact for assistance.
- Tips from Master Teachers - NJIT Master Teachers will discuss strategies for engaging students, managing the classroom environment and addressing academic integrity concerns.
- Open Question and Answer - Opportunity to ask questions and network with your colleagues

Appendix V- Quality Assurance in E-Learning Rubric

Standard		Type
Course Overview and Introduction	1.1 An introduction module includes a detailed syllabus and contact information. 1.2 Instructor provides a statement that identifies the purpose of the class. 1.3 Instructor provides a self-introduction. 1.4 The course overview Includes a statement that demonstrates how course learning outcomes are appropriate to the rigor and breadth of the degree or certificate to which course belongs. 1.5 Prerequisite knowledge or minimum technical skills are clearly stated. 1.6 Instructor provides navigation video explaining how to go through the course	Required Required Required Optional Optional Optional
Organization and Design Elements	2.1 The course is broken into meaningful learning modules. In a typical semester-length course, modules may represent single class sessions, a week of classes, or units of two to three (or more) weeks in duration. 2.2 Instructions to students on how to successfully complete the learning modules are clearly and adequately stated. 2.3 Each learning module should briefly explain to students how the readings, activities, and assessments are intended to help achieve the learning outcomes. 2.4 Each learning module contains observable learning outcomes.	Required Required Required Optional
Course Content Elements	3.1 Any content or learning activities are closely aligned to the learning outcomes. 3.2 The content and activities are appropriately targeted to the level of the learners. 3.3 Students are given adequate opportunities to give feedback on course content 3.4 The relationship between the instructional materials and the learning activities is clearly explained to the student.	Required Required Optional Optional
Assessment Elements	4.1 Any assessments (exams, quizzes, papers, lab reports, or other graded work) are closely aligned to the learning outcomes, and to the module content and activities. 4.2 All assessments are clearly explained. 4.3 The types of assessments selected are appropriate for a fully-online course. 4.4 Evaluation tools should be provided for open-ended activities! 4.5 Assessments are designed to provide effective feedback to the students. 4.6 Students have opportunities to receive feedback on their individual performance	Required Required Required Optional Optional Optional
Interactivity Elements	5.1 Students are requested to introduce themselves to the class.	Required Required

	5.2 Learning activities foster student-student and faculty-student interactivity.	Required
	5.3 Instructor sets clear expectations for instructor responsiveness and availability (turn-around time for email, grade posting, etc.)	Optional Optional
	5.4 Course materials should encourage and support interactivity for each module.	
	5.5 The learning activities promote the achievement of the stated learning outcomes.	
Course Technology	6.1 The tools and media support student engagement.	Required
	6.2 Navigation throughout the course is logical, consistent, and efficient.	
	6.3 The course components are compatible with current standards for delivery modes.	Required Optional
	6.4 The course design takes full advantage of available tools and media.	Optional
Student Support	7.1 The course instructions articulate or link to clear description of the technical support offered.	Required
	7.2 Course instructions articulate or link to an explanation of how the institution's academic support system can assist the student in effectively using the resources provided.	Required
	7.3 Course instructions answer basic questions or link to tutorials or other resources that provide the information.	Optional