To: Policy Council of the System Dynamics Society

From: Ken Cooper

David Andersen

Subject: Progress on Establishing a “Forrester Internship Program”

Date: February 19, 2016

We are now working on a pilot program to establish a Forrester Internship Program. The Forrester Internship Program is an academic-commercial alliance that would place top university students in a multi-month mentoring and training program at firms engaged in the commercial practice of SD. The objective is to create a mentoring opportunity of the highest quality for some of our best new students in the field. We have several things to report:

**We Have Set the Broad Structure of an Initial Pilot Program**. The appendix to this brief report gives the broad structure of the pilot program. Our intent is to pilot the program with a few students from a select set of schools placed with a small number of firms in the very near future. We will evaluate how this goes and propose a larger and more substantial program for the future. We plan to start small and evaluate carefully how this idea work out in practice. In order to start small we are implementing a staged “rolling admissions” process between now and July of 2016.

**We Have Made an Offer to Start with our First Student**. Recently, our informal oversight committee reviewed a small number of student nominations that we had receilved. We have made an offer to our first student to join the pilot program, with the hope of learning more about the logistical structuring of the program.

**We Continue to Assemble a larger Number of Student Applicants and partnering Firms**. We have contacted a small number of solid programs in system dynamics asking faculty for nominations. We have not yet made an open call for nominations. We are informally seeking support from firms with strong reputations for high quality commercial practice.

**We Plan to Report Out Again in July**. We hope to have more good news to report at the summer meeting of the Policy Council in Delft.

*Attachment*: Proposal to Pilot Test Forrester Internship Program

**Proposal to Pilot Test**

**Forrester Internship Program**

**October, 2015**

**Ken Cooper, Sharon Els, George Richardson, Roberta Spencer, Pål Davidsen, David Andersen, John Sterman, Etienne Rouwette, Len Malczynski, and Others**

Working between now and the July 2016 meeting of the System Dynamics Society, we intend to implement a pilot program to explore the feasibility of having the System Dynamics Society sponsor a *Mentoring and Training Program*. The program would match top SD students with top professional practitioners, with the ultimate objective of growing the quality and quantity of SD practitioners. If this pilot proves to be successful, we will be creating a more formal proposal to be considered by the System Dynamics Community. Key Questions and Answers about this proposal follow.

**What is the Proposed Forrester Internship Program?** The Forrester Internship Program is an academic-commercial alliance that would place top university students in a multi-month mentoring and training program at firms engaged in the commercial practice of SD. The objective is to create a mentoring opportunity of the highest quality for some of our best new students in the field (a high-leverage approach to growing the quality of commercial practice in the field, according to George's excellent paper). The intent is to pilot the program with a few students from a few schools placed with a few firms in the very near future. We will evaluate how this goes and propose a larger and more substantial program for the future.

**How Will the Final Program Work?** Commercial firms will propose positions in the training program by submitting a written description of an internship opportunity. Each position will be supervised by a primary mentor who should have at least 10 years experience as a “managing consultant”. Faculty from active SD programs will nominate their best students for this experience. Students will review the lists of posted positions and express their preferences for specific positions. Supervising mentors will review the list of nominated students and express their preferences for working with specific students. The program will devise some sort of a matching process to match students to positions, including a screening and interview process.

Typically a student will be mentored by one senior consultant in the firm working in tandem with the nominating faculty mentor to assure that the experience has value both for the firma and for the students’ academic programs. At the end of each training experience, the students will be given an opportunity to rank the position. In addition, mentoring firms will be given an opportunity to evalulate the students. These evaluations will have the intention of leading to continuous improvement in the overall program.

**What Products Will Students Produce**? –We envision that each student will complete two distinct types of products. First, students will work on one focused and explicit project that they will start and complete during the agreed upon time of the interning experience. The project should be one that is helpful to firm but not on its "critical path"-- including design/build/test/presentation of model and analyses. Each interning experience will last at least 3 months. The second product will consist of documentation of at least 2 case studies known by people in the firm. The selected projects will typically be high impact applications that are no longer sensitive or confidential. Both of these activities are intended to yield high mentoring opportunities.

**What will be the Academic Component of this Program**? In addition to producing the two types of products sketched above, students will work through an organized course of study that will be coordinated with their degree program at their sponsoring academic institution. This program could take the form of a more structured independent study or a less formal set of activities undertaken under the guidance of the student’s academic supervisor. Explicit learning content may vary from one academic institution to the next. One objective of the pilot program is to learn more about what should be the explicit teaching-learning content of the academic component.

**Unresolved Logistical and Program Management Details**. Many aspects of this program remain to be worked out and we are looking to the pilot program to give us the experience necessary to craft a program that will work in the long run. For example, who will finally select and place the students using what process? Since this program has as its primary object increasing the pipeline of quality interns entering commercial practice, firms must have a say in placement that gets balanced with other considerations. Will students be paid? Will all or some firms provide a stipend to cover student costs? Are grants possible? Can stipends be coordinated with existing levels of student support, if any? Will the program be full time? Will it take place during an academic semester or over the summer? What level of study will characterize student applications? Will applications be limited to students at the Masters or Ph.D. level? What level of “prerequisite” skills, training, or coursework will be required? Will these requirements be uniform across all applicants or will commercial firms tailor requirements to their individual needs. Finally, how will the program deal with visa requirements that may come into effect if internships are paid (for example will commercial firms be able to make payments to schools who are allowed to support students under most visa regimes?)

**How Will the Pilot Program Work?** A group of consultants and academics have been working on this idea for some time (Ken Cooper, Sharon Els, George Richardson, Pål Davidsen, Roberta Spencer, Len Malczynski, John Sterman, and David Andersen). This working group will put in place a first approximation to this program with the first set of placements to take place in the next possible school term. The form of this pilot will be less structured than a final program, so that we take lessons from the pilot to support refinement and expansion of the program.

**What are the Next Steps?** Ken Cooper and Sharon Els will approach selected commercial firms and ask them to propose positions using the format in Appendix A. George Richardson and David Andersen will approach selected faculty members and ask them to nominate their best students using the format in Appendix B. Interested students will fill out a statement of interest in the program using the form in Appendix C. ***For the first several rounds of this program (between now and the 2016 meetings in Delft), admissions will be on a rolling basis. That is student nominations will continue to be accepted and reviewed. However, a first set of nominations are “due” by October 31, 2015***. Magic will then occur, leading to the first set of matches at the July, 2015 meetings of the System Dynamics Society.

**Appendix A**: Format for Describing a Position for the Forrester Internship Program

**Appendix B**: Format for Letters of Nomination for Students Applying to the Forrester Internship Program

**Appendix C**: Guidelines for Students Applying to the Forrester Internship Program