

Syracuse, October 9, 2009

To CNY ASQ Chairs and selected colleagues.

Dear CNY ASQ Section Chairs and colleagues:

I am writing to you to propose a *Joint Project for our CNY ASQ Sections*: to sponsor a non-profit **Quality, Reliability and Continuous Improvement Institute of Central New York (QRCI-CNY)**.

I have been working on this project since 1998, when I was a SUNY Cortland faculty. When I retired, I continued working on it as a Syracuse University faculty. Still, I think the best and logical place to incubate this Institute, is within the CNY ASQ Sections.

In a nutshell, the QRCI-CNY, supported by grants, would help small and medium size organizations, by conducting quality assessments of their operation. This would help them improve quality, reduce costs and increase productivity. Such small organizations cannot afford QR&CII services (but badly need them to survive, especially in today's economic climate). It would keep them afloat, saving many jobs in CNY, and possibly creating new ones. In addition, they would *convert*, to the Quality philosophy, becoming paying customers of our ASQ QR&CII organizations and consultants.

The QRCI-CNY would also work with HS pre-engineering teachers to encourage HS students to study science and engineering topics. We would conduct special sessions and create special materials for them. The QRCI-CNY would finally provide practicing engineers the training and the materials for self-study, so they can learn more about Q&R, which would allow them to keep their jobs and thus remain in the community. Once in the books, The QRCI-CNY would write proposals to local, state and federal government and to industry, seeking funds to operate.

The QRCI-CNY would hire college students as interns to conduct the said quality assessments, thus providing hands-on experience to these students, as well as contacts for them to be hired locally, after completing their college studies. In addition, these students would be making money by learning more about what they are studying – and not by delivering pizza and similar types of non-technical work.

You can find more information about The QRCI-CNY in the following web pages:

http://sunews.syr.edu/FacultyVoices/FV58_Romeu.htm and
<http://lcs.syr.edu/faculty/romeu/SUQRPrpExcSm.pdf>

The QRCI-CNY addresses a very important National problem: the education of current and future engineers. Several reports have been written about this. Among them, *A Nation at Risk* (<http://www.ed.gov/pubs/NatAtRisk/index.html>) provided an awakening call. The recent NSF report *Moving Forward to Improving Engineering Education* (<http://www.nsf.gov/pubs/2007/nsb07122/nsb07122.pdf>) is an update of the issue.

For years I have studied and researched the mentioned problem. You can find two recent papers of mine dealing with this issue in the web:

Romeu, J. L. (2006). Teaching Engineering Statistics to Practicing Engineers. *Proceedings of ICOTS-7*. Brazil.

http://www.stat.auckland.ac.nz/~iase/publications/17/4A1_ROME.pdf

Romeu, J. L. (2007). Enhancing the Statistical Education of Practicing Engineers. *Proceedings of the Fall Technical Conference*. JAX, FL.

<http://web.cortland.edu/romeu/FTCPaper07.pdf>

Romeu, J. L. (submitted to ICOTS-8, 2010). Professional Organizations

<http://myweb.whitman.syr.edu/jlromeu/EngEducPapIcots8.pdf> Liubliana, Eslovenia.

The root-cause of the problem lies in that college engineering education is lacking in statistics, basis for quality. And there is a large gap between statistics college curriculum, (<http://lcs.syr.edu/faculty/romeu/CIS321Syl.htm>) and engineering needs (per CQE BOK: <http://www.asq.org/certification/quality-engineer/bok.html>). The issue is how to help the practicing engineer go from one to the other, at work, on his own, via self-study.

At the beginning, I thought of having such Institute in SUNY, where I was working in 1998. After my retirement, I started working with Syracuse U. and thought of having it there, instead. After several unsuccessful trials, I realized that the Institute all-inclusive characteristics made it better suited to be an Independent organization. As a part of the University, a traditionally very hierarchical organization, the QRCI-CNY would be highly constrained by rules, regulations and excessive costs that would be appended to it by the university authorities. Hence, I decided that it was better to create it through an umbrella organization that would encompass many universities, many regions and many quality specializations: the American Society for Quality and its CNY Sections.

In addition, creating the Institute as a joint CNY ASQ non-profit, instead as an appendix of another institution, has three very strong advantages:

1. It would be wider in scope, serving more CNY organizations, training more CNY engineers, and serving engineering students from RIT, SUNY-IT, SUNY-Binghamton, Clarkson, Rochester, Cornell and Syracuse U., among others.
2. It would be much cheaper to operate. For, an independent organization would hire *interns* directly from the above-mentioned colleges. Hence, the Institute would not have to pay college tuition for its interns, nor give a 27% out of every grant for “administrative costs” etc. At the start of the Project, this is a real booster!
3. The Institute would have its hands free to seek support from local, state and federal government, as well as from Industry and Foundations. It would not need to abide by the priorities of a broader organization, where not all funding sources would be available for the Institute to submit proposals, request grants, etc.

Summarizing, the QRCI-CNY would have the following functions:

(a) to provide free or affordable quality assessment services to small and medium size organizations, supported with grants from local, state and federal institutions, with a specific focus on helping them increase their product and process quality and reliability; to use college engineering students as interns in this activity, in order to provide the latter with the hands-on experience and expertise in such important engineering specialties, and to increase awareness and faith in the Quality Philosophy, which would create a broader demand for QR&CII services and products, increasing our practitioners' customer pool.

(b) To participate in, and initiate studies and surveys of new methodology, and assess and sequence educational materials that continuously improve quality and reliability, that help us to stay abreast of current and emerging issues and knowledge, in our field.

(c) to offer training and support to high school teachers and students, interested in preparing students, or in studying science and engineering; and to offer training and support to practicing engineers that wish to expand their knowledge of, and their ability to use Q&R methodology for continuous improvement, as well as to serve as a capacity-building resource for those individuals and organizations in our community;

(d) to develop courses, educational material, conferences and other forums where any and all aspects of QR&CI are shared, improved and made available to practitioners.

(e) to cooperate with other professional societies, colleges, practitioners and consultants in the area, to complement their already existing work and build on them, in order to improve QR&CI practices; never to compete with them in a mutually destructive race.

(f) To purchase, lease, receive by donation, acquire and operate real and personal property suitable or convenient for the purposes of the corporation; and to solicit in person or writing or through any other licit means, such support; including the writing of proposals for funds and for projects that contribute to the development of the Institute.

Of course, all of the above ideas are preliminary, subject to discussion and modifications, as their purpose is only to elicit your cooperation towards this emerging Project.

To finalize, what do we need, toward making this Institute a success:

1. ASQ National supports community projects of this kind (I talked with ASQ Exec Director about this in our recent October meeting in Milwaukee). They encourage us to apply. ASQ says we would need about \$1000 for legal services, to get this organization registered as a non-profit corporation. We need to request this fund.
2. We need to discuss this, create a Board and Bylaws, and run this organization.

I will stop here. I would like to have your feedback, now. Thanks. Respectfully

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