9 June 2018
From: Rob Reilly
To: EdSoc Board of Governors
Re: Thoughts as we move forward

I am now in my 15th year as a member of the EdSoc's Board of Governors (BoG). I have continuously held one BoG position or another since 2003. With the exception of my 3 years on the IEEE Board of Directors, I have been a diligent BoG member, during that time I was only moderately involved with the EdSoc. I have had terrific experiences, and, I hope that I have been a benefit to the IEEE's Education Society. I also appreciate the collegial relationships I have formed with many of you and the support from the Board.

I plan to continue for several more years. Thank you all for my opportunities. I greatly appreciate them.

Typically, I submit a report for my area of responsibility, but I would like to take this opportunity to share my (wider) perspective with you.

I have listed my thoughts in order of their importance in my perspective:

1. **Survival of the fit** -- In recent years, I have begun to wonder how the Education Society can survive as every other IEEE society has an 'education' component. We are losing our unique *niche* within the IEEE. How can we adjust to this? I also wonder how the IEEE Education Activities Board, one of the 6 major Boards of the IEEE, can survive as they suffer from the same situation we do. Is there an opportunity for cooperation? Or is some other structure needed?
    a. **Consider Forming an IEEE Technical Council** – the IEEE has organizational units entitled "Councils". Their function is to provide an organizational structure for groups of Societies that have a common interest where that interest is important to each Society, who would be a 'Council' member, but is outside their primary Field of Interest (*e.g.,* the RFID Council). IEEE Council's do not have individual members, their members are IEEE Societies and they conduct business to promulgate their commonality—our Council's common interest would be professional skills (*i.e.*, soft skills). Our Council could be composed of most Societies in Division VI. **The primary reason for this would be for visibility within the IEEE for our Field of Interest as well as other Council members' Fields of Interest** (*i.e.*, soft skills (professional skills).
        i. *The Interface* could be a product of the Council. It would be an IEEE publication that is comprised of 'soft skill' articles—a solid revenue stream. This could either be a product of a Council, which we belong to, or it could be solely a product of the EdSoc.

2. **Our Revenue Stream** – the EdSoc's revenue stream consists of proceeds from our IEEE Transactions on Education, membership dues, and conferences.
    a. **Conferences** – Thanks to Russ we are in an excellent position as far as conferences are concerned. Revenue (and expenses) from conferences does vary given several factors, not the least of which is the EdSoc's desire to establish conferences in underserved areas. This humanitarian effort is terrific. The derivative impact on our financial situation can vary. While conference revenues are solid, those revenues do not appear to be ever going to be substantial enough to fund the EdSoc's overall budget. And that's fine.
    b. **A BIG deal for us: 'Life' members in EdSoc** -- Our total number of members is dropping. It is currently at 3,013, this is an approximate 10% drop from last year. Recent years have held steady at 3,300-3,500 members. What is more concerning than our lack of retaining members is the number of EdSoc members who are qualifying for IEEE 'life'

member status. 'Life' members do not pay IEEE or Society dues--we lose that revenue. Our current membership number is 3,013. minus those in 'Life' category we have 2,548 dues paying members. We have 465 members in the 'Life' category (not required to pay dues); and that number is growing while our number of non-renewals is rising.

   c. **IEEE Transactions on Education** – we also need to be aware of our revenue to the ToE from IEEExplore downloads and via non-member subscriptions (*e.g.*, university libraries). <u>It would be a non-trivial concern if that revenue was on a downward trend!</u> But, in general, it does not appear that we have as much of an understanding of the ToE's revenue stream, expenses, and processes as we should have.

3. **Chapters** – Years ago, the model of a chapter in IEEE was functional. The explosion of IEEE conferences, publications, and online knowledge has, for the most part, supplanted that model. We must <u>not</u> view our membership terrain as unique Chapters. We must view our Society as one large Chapter and deal with our members much more directly. We must also respect that there are Chapters in-operation and Chapter officials that are doing an excellent job. BUT we must also recognize that, in many regards, the current model of a Chapter is has a choke-point (*e.g.*, if you do not live near the Chapter officers, you will probably not receive many services that the Chapter provides). Also, the IEEE requirements for Chapter paperwork (administrative chores) do not attract Chapter leaders.

4. **Capstone projects** – We should consider identifying a few key Education Society projects. We have a membership base that will support activities in certain areas of interest. We need to have a reason for being and IEEE society! We need to have a mission for the betterment of humanity! I have listed 3 possibilities:

   a. **Standards** – Hamadou's project should be more widely supported by our Society. It appears to have excellent educational implications.

   b. **EftA** – IEEE Engineering for the Americas will build upon the 2004 Organization of American States' (OAS) initiative whose overarching <u>concept</u> "to build engineering capacity… that creates [local] workforce capabilities… [so that a country can] compete in today's global economy." OAS-EftA's initiative was exceptionally well-crafted. However, OAS-EftA remains a <u>conceptual</u> model that has not identified a center of gravity, secured funding, involved industry, or academia, even though there continues to be encouragement from governments, academia, and industry for its principles.

   c. **The Interface** – was a regular publication of the EdSoc and the ASEE's ECE Division but fell into a hiatus when Bill Sayle passed away and the ECE Division's funding became an issue. At this time The Interface could be a tool to propagate the mission of the EdSoc and several other IEEE societies that have horizontal Fields of Interest to IEEE members (*e.g.*, reliability, social implications of technology, professional communications, product reliability, technology and engineering management)

5. **Awards**

   a. **Second level awards** – we have a number of major awards that identify great work in education and in the Society's area of interest. But I suggest that we have a second level for 'recognition'. The Computer Society has excellent examples of such awards and recognition.

   b. **Award approval** at BoG level or Awards Committee level – the Awards Committee and the various subcommittees do an excellent job selecting qualified candidates. BUT it is highly unusual within IEEE for the subcommittee's decision to be final. Typically, the Awards Committee or the BoG will make the final decision.

6. **Publications** – all our publications are important as they either generate revenue or they are the only regular contact we have with our members. Thus, publications are either a revenue issue or a membership related issue—both are non-trivial issues.

a. **The Interface** -- was a regular publication of the EdSoc and the ASEE's ECE Division but fell into a hiatus when Bill Sayle passed away and the ECE Division's funding became an issue. At this time, The Interface could be a tool to propagate the mission of the EdSoc and several other IEEE societies that have horizontal Fields of Interest to IEEE members (*e.g*., reliability, social implications of technology, professional communications, product reliability, technology and engineering management).

b. **News&Notes** – this was a regular publication, I was the last functioning editor. I did pass the torch twice, but that was not effective. The difficulty on both occasions was the editor was not close the Board's actions or the actions of various committees. Thus, gathering information for publication was difficult.

c. **Transactions on Education** – this is, by far, <u>our major source of revenue</u>. We do not appear to be effectively seeking quality manuscripts, the publication continues to be very thin. The impact factor continues to be low. We spend inordinate amounts of cash for this publication and we do not review the processes of the ToE in-spite of warnings from 2 past EdSoc presidents.

d. **TLT publication** – there are two IEEE Societies that sponsored this publication. The Computer Society has withdrawn its involvement (financial support and leadership). The Computer Society has seen the proverbial *writing on the wall*. We must make some decisions in regard to how we can afford the TLT and how we can oversee this publication as it moves forward. Note:

7. **People Behaving Badly** – this sort of activity has adverse impact on a Society and on IEEE. In my time as a member of the IEEE Board of Directors, we have stripped people of their IEEE membership, revoked their status as an IEEE Fellow, you get the idea. The level of 'mischief' seems to be everywhere. Some 'mischief' is relatively minor. But some is quite insidious and must be attended to by the powers-that-be.

   a. **Fake Conferences** -- it's rare, but the IEEE is uncovering membership registrations by fake people. This is done to create a fake Chapter of a Society so that the 'Chapter' can sponsor of 'conference', which is also fake. This has happened to the EdSoc about 8 years ago (*i.e*., the Wuhan (China) Chapter was a fake Chapter populated by fake Graduate Student Members). The motivation is that the fake conference receives registration fees and the conference 'papers' are then published by IEEExplore.

   b. **Fake Credentials** – this is also rare, but it appears that there are people becoming IEEE members and even being elected/appointed to leadership positions and their academic/work credentials are fake.

      i. **Solution: Nomination Committee Policy** – I have been a member of the past 8 Nominating Committees and I was the Chair of the committee twice (as Junior Past President). There have been a few people submit nominations papers and no one on the committee knew-the-person, which is not a death blow by any means. But given my recent experiences as a member of the IEEE Board of Directors and a member of other committees at that level, I have become very wary of acts of 'mischief' that people engage in. The difficulty we could easily experience is that we elect or appoint a person who is involved in some sort-of personal or professional 'mischief'. Of course, we cannot become a police agency, we cannot become suspicious of every action. BUT, I suggest that <u>we need to perform due diligence</u>, which is a legal requirement. I suggest that the due diligence is that we insure that our officers and BoG members possess the credentials they claim to have. **I suggest that it be a policy of the Nominating Committee that all nominees for any EdSoc position provide an independent source that the committee can contact in order to validate their authenticity.**

   c. **Author coercion/citation stacking** – I am a member of a TAB committee that is directly overseeing the operations of a Society's publications. This Society has 3 major, and they all have Impact Factors (IF) over 7.0. The publications are terrific, the articles are top

quality. The 'mischief' involves stealthy activity on the part of a few editorial staff people and/or on the part of special issue editors who either have coerced authors into adding irrelevant citations for the purpose of raising the IF of a publication or adding prowess to their personal publications (e.g., one special issue editor added his name to the list of authors on 9 of the 10 articles in that special issue just before the issue was published). While this is not an issue with our publications, it just seems to me that the two most recent Editors in Chief have been very resistant to answering any questions or any sort of oversight.

8. **Paying for travel/hotel cost to BoG meetings** – Travel to the BoG meetings is not reimbursed by the EdSoc. In past years, this seemed to not be an issue as the BoG members typically attended the ASEE and the FIE conferences as they had travel budgets from their university (and were USA residents). But today we are a much more international Society and since our BoG meetings are almost exclusively in the USA, travel for non-USA BoG members can be problematic. That certainly seems to dissuade attracting non-USA people to the EdSoc BoG. There are also BoG members whose attendance at FIE or ASEE would greatly facilitate their EdSoc duty (*e.g.*, Hamadou and the Standards Committee—committee members typically attend both ASEE and FIE, but Hamadou is penalized by not being able to reimburse his travel/hotel from his EdSoc Standards budget).

9. **Responsibilities of BoG members** – it seems that every BoG Member should have a responsibility in regard to some function of the EdSoc (*e.g.*, member of a committee).

10. **Housekeeping** – there is a need to review the activity level of each EdSoc committee and refresh the membership roster and function of each committee. It is also not clear who oversees what committees.

11. **Coordinate travel** – from a review of the EdSoc budget, it appears that we have a number of officers and the EiC with travel funding, and we have BoG members who travel on their own, or for other reasons. I suggest that we establish a mechanism to coordinate local meetings with those trips.

12. **Senior Past President not a member of Executive Committee** – It seems very odd that our Bylaws do not include the Senior Past President on our Executive Committee.