
Towards excellence: effective reflection

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Abstract

Taking a reflective look at the historical background of changes in the education system as a whole, allows us to characterise the student of today. It also helps us identify the strengths and weaknesses of academics. In order to create self-aware, self-directed students we need to inculcate appropriate values, attitudes and skills among us, the academics. Recognizing that striving for excellence is a continuous process undertaken for the common good of the institution, the society and through that the development of the individual, is of paramount importance. In this undertaking towards excellence it is the skill of effective reflective practice that determines the effectiveness and meaningfulness of the changes that we make to our teaching learning practices creating a better environment for our students to grow and develop as responsible productive citizens.

In my 29 years of teaching and learning I have listened, observed and reflected and today I would like to share some of that with you. The theme of '*Developing self-aware & self-directed students & staff*' that you have chosen for the sessions reflects your important work towards achieving excellence in some key stakeholders of higher education. In order to create self-aware, self-directed students, we need to incorporate these aspects into the curriculum, and to achieve this, we first need to create self-aware, self-directed staff. Let me begin with the question: what is the nature of excellence? Excellence should not be an end point, rather, a continuous process to which each individual must put in a lifetime of diligent work towards the collective whole: creating excellence in the system. At an individual level I believe that

striving for excellence can only be successful through developing reflective practice, which must be applied at every opportunity and to understand why things are the way they are.

I will take you through a broad reflection on how the education system has changed over the years in order to recognise the *baseline* status, as it were, that both students and staff are at, from where we need to make changes. Such reflection and evaluation are essential to making meaningful change. I will then focus on specific problems that need to be addressed in supporting the development of self-reflective academics. Finally, I will take you through some examples of curriculum changes our department has made to demonstrate the spiraling of reflective practice and the 'process of change'. What I discuss is by no means a comprehensive analysis and its intention is merely as opportunities for reflection. My overarching aim today is to discuss the usefulness and beauty of effective reflective practice and spur you to take it on with even more zest than you have until now.

The value of reflection

Reflection is an important characteristic that sets apart the great scholars of the past. Then, they had time to think and reflect, or rather, they *took* the time to think and reflect. The Indian Nobel Laureate (1913) Rabindranath Tagore stated that "proper teaching does not explain things; proper teaching stokes curiosity", but in order to fulfil this objective, one must create the appropriate environment which allows the curiosity of the student to blossom. Visva Bharati (then a school and now a University) founded by Tagore, has a physical environment and curriculum which encourages free thinking and freedom of choice. Around the same period Bertrand Russell (Nobel Prize in 1950) advocated for teaching methods that supported freedom of thought in a young child. Alfred Nobel himself whose vision was to applaud those who made "the greatest benefit to humankind", was a thinker and entrepreneur with many patents to his credit. Indeed there can be no excellence without deep reflection. Even today, the best do have time to think, and names from Asia like Amartya Sen (Nobel Laureate for Economics in 1998) who studied at Visva Bharati come to mind.

Effective reflection requires that one goes through all its stages, or in other words, not merely stopping at "reflection" but proceeding to complete at least one Reflective Cycle; for example: observing or experiencing, followed by reflecting on the thoughts and feelings generated by that observation, analyzing using theory to find causes for why it happened, planning for change, executing change and then a second cycle of reflection and a third and so on. The spiral achieves better practice in teaching, research, and daily life. In the school system in Sri Lanka, free thought has not been encouraged adequately, and hence for teachers too, reflection has to be learnt and internalized for the most part. Effective reflection arises through intrinsic motivation and is never a drain on time or effort.

Observations and actions taken, during the early period of the education landscape

Looking at the landscape from a historical point of view, from colonial education in Sri Lanka to today's global scenario, helps us describe the mindset of the students we encounter and what is expected of us as teachers today. Beginning with the Colebrook commission, the British colonial leaders educated the local elite in English, and Ceylon at the time had adequate economic progress to support a well aligned education system to her economic and developmental needs of the day. Hailed as excellent and globally competitive, it survived into the early post-independence era. To this background were added the vernacular schools. Gradually with time, the need for equity was recognized, and universal adult franchise, further reinforced the need to educate a larger proportion of the population.

Taking action on these observations, the Kannangara education reforms were developed and adopted in 1945; the first important turning point in Sri Lanka's education. It introduced the free education system with a comprehensive plan for developing vernacular education, as well as the creation of schools of equal standard to the missionary schools providing education in English to children selected on merit. It was planned that English literacy and high standards in education would be maintained while improving equity and gender parity.

Missed opportunities and decline in standards

A series of unfortunate events followed, which show us the failure to observe, analyse and act at multiple potential action points leading to the situation we have today. Funding restrictions and a series of ill-thought-out changes resulted in; the inability to provide English and Science education of adequate standard; the creation of university education in Sinhala medium as a solution to those unable to enter existing English medium universities; youth unrest among qualified (degree holding), yet under-employable youth and the use of district quotas as a solution for poor quality education in the periphery. The result, an overall poor learner outcome compounded by the private tuition culture which promoted rote learning. A gradual decline can be seen from then on, of the value of the school as the center of growth of the person as a useful citizen, both in the eyes of society, and consequently in reality. Currently, a majority of students are poorly skilled and exposed to poorly structured assessments at school with limited places of entry to university, which creates an extremely unhealthily competitive environment. The observation that a child internalizes rote learning patterns throughout his/her entire life has deep connotations for the way we plan changes during higher education. Their effectiveness is dependent upon our ability to apply suitable theory and plan appropriate corrective action.

Effective reflection and resulting actions in the global arena

The successes of 21st century education reforms among many developed countries are due to the fact that they are based on a country's needs, taken following close monitoring and evaluation. Effectiveness of changes are due to the fact that observations and reflections are also followed by analysis and concrete actions. Unlike in Sri Lanka, timely intervention ensures that changes closely follow a country's priorities such as its economy or security as in the case of the USA's education reforms which followed the launch of Sputnik by the Soviet Union. Looking closely at global education reforms, it is clear that they focus on values, attitudes and social integration; aspects of education which were implicit in education during the 18th century, subsequently lost and are now being reinstated as positive actions and would no doubt help reduce the moral deterioration of the social fabric of the world today. One cannot over-emphasize the value of these attributes of 21st century curricular reforms and they are no less valuable to the education system in Sri Lanka today.

Higher education in the contemporary landscape: analysis and actions for quality assurance

In Sri Lanka, the World Bank analyses identify three specific areas that need change. Improved quality in; student learning, research and academic excellence. They reported that employers identified gaps in communication, desire and ability to learn, ability to work as a team, proficiency in English and Information Technology (IT). Among academic staff, inadequate knowledge of student-centered pedagogical approaches as well as of IT, English, soft skills, a lack of interest in applying research to the real world and poor-quality links with industry were observed. Changes in the recent past focus on quality assurance and aim to address employability and productivity. They are decisive positive actions which resulted from observations of the ground situation, and although the timing is somewhat later than ideal, have followed through to the analysis and action stages of the reflective practice cycle.

Staff improvement is at the heart of improving higher education in Sri Lanka

Let me begin by stating that staff evaluation metrics are limited in their capacity to evaluate academics. I do not refer to any one staff promotion document in particular, but promotion documents as a whole; as the limitation is not in the document, but in the user. Quality assurance metrics are more a means to an end than an end in themselves. They help us assess, reflect and take action and will no doubt assist us in improving standards. An academic is one meant to be capable of learning at higher levels, a learned person, whose learning has

equipped him/her with a set of values which elevates them to a point worthy of being a role model to students and society. To an academic who strives for excellence, where excellence is a continuous process, the benefits of promotions will follow. It is unlikely that a single Nobel Laureate I mentioned above set out to win a Nobel Prize! But we cannot forget, that the academics of today are also products of the same education system we just discussed and are afflicted with the same ailments affecting the students. So let us begin with accepting that rather than sweeping it under the carpet and see how we can proactively address this in our academics. Acceptance that there will be deficiencies in our attitudes and values is the first step to being self-aware. Enabling us to become self-directed; being open to reflective practice and undertaking change towards creating an excellent higher education system.

The intensely competitive metrics-driven society that we are a part of has led to many academics viewing the marking schemes for promotion as a mere set of tick boxes to be ticked and collected in the shortest possible time, in order to get to the top the quickest. In this frantic rat-race many golden opportunities are missed and not even recognized as opportunities, as the new value set, values different things to what excellence really means. It is time to re-evaluate and re-examine what is really important in life. In this very same forum, Professor Jayadeva Uyangoda in his past SLAIHEE keynote address, extensively discussed intellectual integrity among academics. I wish to draw your attention to another aspect that needs discussion; practices that fall well within what is right. But I humbly ask you to question whether all that is right is also righteous. In our journey towards excellence, we need to ask ourselves questions such as, should I publish the findings of one study as two articles, or do I make it three? If we have thought about our values and what should guide us in such decisions, the answer will be clear. The decision is based on answering the question: is there adequate work for two or for three papers? Yet some may decide based on how many papers they need, to get their promotion as soon as possible and may chose to ignore the question of how many papers this work is actually worth. While some clearly take a pride in being righteous, others may not. Yet the system cannot progress unless the individual's aspirations are high. Then comes the question, what do we consider to be worthwhile aspirations. Is it the title (professor) itself that we aspire to, or the process by which we get there. While in the olden days both were one and the same, today they may at times be two different things! Thus, you can see that by reflecting and becoming "self-aware" on these aspects, you can become "self-directed" to develop yourself as a worthy and respected staff member, through the two key self-developmental components forming the theme of this conference.

The next question is, what motivates us to do our best? If free education is considered a right, one may not see it as a duty to give back to society. However, if free education were considered a privilege since society pays for it, one naturally knows to give back to society. Often, our behaviours are shaped by how we view things, and if we work on the premise that we must give back our best, it becomes a worthwhile exercise to dwell on why and how

change is not always effective, and what we must do to achieve effective change and strive for excellence. While there are many external impediments to achieving effective change, the strongest impediments are closer to home, and originate within us. In addressing some of these issues, becoming open to introspection supports our journey in becoming an effective 'self-aware', 'self-directed' academic. Another significant impediment to being effective is the failure to be 'self-aware' that we the teachers of today, are also products of the 20th century education system with rote learning at its base, and if we are to make effective change, we need to accept, learn new skills and work around this. We need to become 'self-directed' to move out of our own box to "see" what is required for the 21st century global economy and hence 21st century education.

Preparing to serve as role models and mentors

We as academics are called upon to serve as role models to our students and the society at large. We have a great collective force in being instrumental in changing society, to encourage, foster and guide by example, for which we need to constantly reflect inwardly and mold ourselves to be responsible academics. I have been fortunate in having great mentors who were my role models in my life who created strong and lasting impressions. What I learnt was from what I saw, rather than what I was taught. They instilled in me that duty and discipline is supreme. Today many young academics do not know that assessment and teaching need to take priority over other professional work. Most value the limelight, and will not undertake work that requires meticulous hard work for which there is little appreciation, just the satisfaction of having done your duty. Indeed, one wonders how often the word "duty" even crosses the mind. Consistency, meticulousness, diligence, perseverance, wanting to make a difference at micro level, were strong messages that resonate with great role models. It is this type of hard work that is required if true excellence is what we seek.

In the university system, rewards for achievement are in place, only as a guide. As intelligent people we need to reflect on what excellence really means; surely it must mean that we strive to do the best we can in any given task, and that we are constantly at it. It is a lifetime of striving to give our best to the system and the work we do, that will generate excellence in the system as a whole and through that, recognition for oneself. Unfortunately current metrics and ranking systems can only look at the achievement of individuals for the purpose of ranking or promotion. This has placed undue emphasis on individual achievement: which in itself threatens the whole. Intelligence helps us absorb good values at any point in our lives, even if they were not a part of us in our early years. Intelligent reflection is what identifies the good from the bad and the temptation to selfishly work for oneself at the expense of the greater good of the system to which we belong.

Frequent discourse and reflection among peers and academic staff on many broad aspects of conduct are useful to this end. Reflection on ethical issues and promoting discussions among peers on simple ethical issues during work generates a healthy work environment. If we value duty and social responsibility which we inherit with free education, prioritizing our duties becomes easy.

LET ME SUGGEST A FEW POTENTIAL POINTS THAT CAN BE USED TO REFLECT ON:

- Striking the right balance.
- Aspiring Professors need to have the humility to ask the question, - am I self-aware of the expected role and am I adequately equipped for it.
- Attitudes to teamwork include recognizing a variety of strengths in people. One need not always think differently to make a meaningful impact.
- Learning is a lifetime process – learning accumulates with experience, much like a mature wine that becomes tastier with age. There is a time to climb the ladder and competition between peers is needless and detrimental to the overall goal of the whole. Those who truly deserve recognition will receive it, even without clamoring for the limelight.
- Adopt internal measures of success for oneself at individual level rather than be slaves to the external evaluation measures; when an internal benchmark is set it will be higher than what is expected from outside.
- Reflection and constant re-evaluation of values and attitudes help individuals align with their roles as an academic.
- Reflection on research and its relevance to society and the ethics of the use of funds for certain topics.
- Reflect deeply on why the teaching environment is the way it is, as we have touched on today.
- Are changes evidence based as well as realistic for our given environment (often changes are made because they have been done elsewhere and courses and teaching methods are adopted rather than adapted to suit the recipients).
- Value our impact on society as opposed to the impact of our work only for our individual gain.
- Study the causes of the breakdown of social structures, as only then can we try to break the cycle of the downward spiral of moral decline in our society of which students and we are a part.

The discussion that follows displays the spiraling of reflective practice in teaching.

I will spend the last part of my discussion on some changes to the curriculum in our department with the aim of reiterating the importance of reflective practice and its spiraling, which is the generic information directly applicable to you. This process ensures that much thinking goes into change. In order to appreciate the changes let me give you a brief overview of the curriculum structure. Biochemistry and Molecular Biology (considered as one subject) is taught in the first year of the five-year medical curriculum alongside Anatomy and Physiology, the basic science subjects. The second, third and fourth years comprise of applied sciences and clinical teaching and in the final year the clinical subjects are taught. The basic science subjects taught in the first year are expected to provide the scientific basis of the material taught in the clinical years. Hence it follows that the best assessment of how well Biochemistry has been learnt can be obtained from students who graduate as well as those who teach during the clinical years. The original Biochemistry curriculum was of a similar format to Biochemistry teaching in the science courses. The changes were made in order to teach biochemistry as a subject integrated with Anatomy and Physiology and with greater clinical relevance.

REFLECTIVE PRACTICE CYCLE: SPIRALING

Initial **observations** that a change in the basic sciences curriculum was needed came as informal feedback received from clinical teachers in the fourth and fifth years who observed poor basic sciences understanding when students were in the wards.

Reflecting on this, it was deemed necessary to collect more formal feedback to identify whether this was true and why.

Planning to collect formal feedback, collecting the feedback and its analysis spanned a few years. The types of feedback included:

- Focus group discussions among both high achieving as well as poorly achieving students.
- The Dean of the Faculty conducted a questionnaire-based survey among students who had finished the final exam (fifth year) which included the relevance of the basic sciences to the requirements for competent patient care.
- Informal discussions regarding teaching experience among staff.

Applying theory: extensive analysis of this feedback and what it means in relation to the theory behind teaching and learning followed, covering the following aspects.

- Teaching/ learning theory as applicable to science teaching for medical students.

- Study of curricula in other countries and in other faculties.
- Discussions with the medical education center and through workshops on teaching/ learning requirements.
- Study of the characteristics of the students entering the faculty, requirements and limitations: immature learners coming from a pedagogical learning environment needed to be transformed in a short space of time, into effective learners in an androgical learning environment in order to mature into self-directed learners.
- Further feedback from multiple sources were analysed in order to inform us of how best to achieve this transition to androgogy.
- A Level knowledge relevant to Biochemistry teaching.

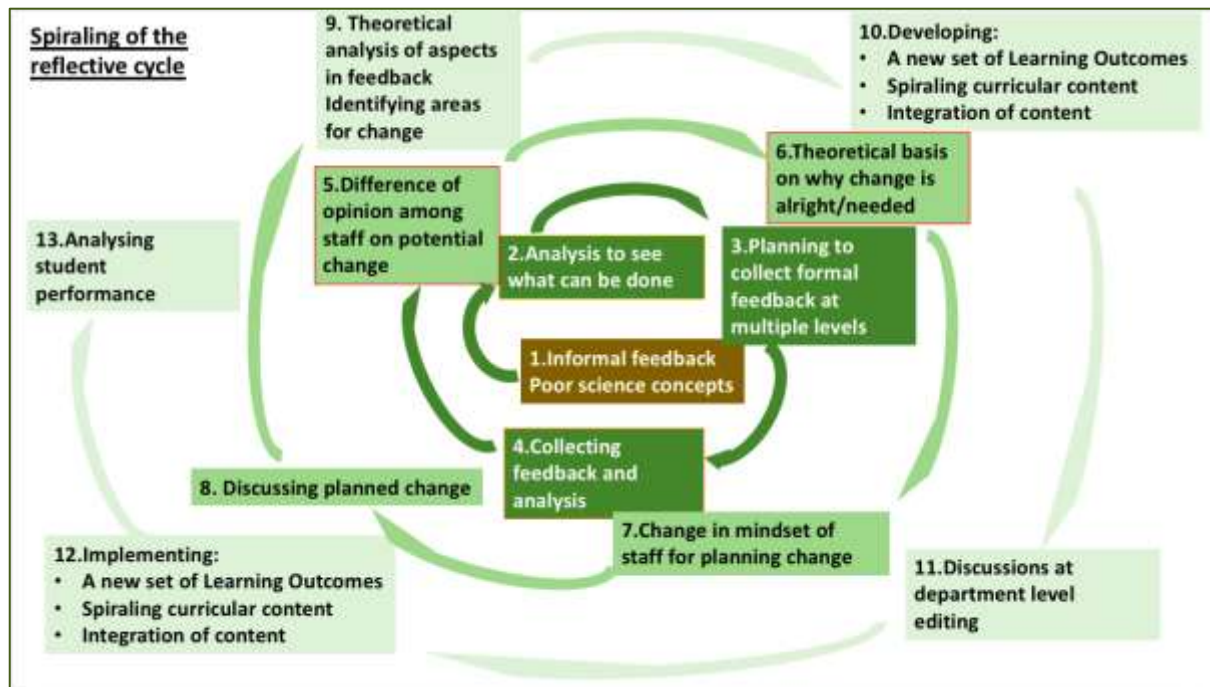
Changes that ensued from the theoretical analysis

Analysis indicated the reasons as to why the way we were presenting the content was not how the medical student needs to see it; the focus and perspective did not align and there was inadequate relevance of Biochemistry to Clinical Medicine shown.

We needed to integrate the curriculum with Anatomy and Physiology and make the teaching more “real” to the students, with greater use of case scenario to pointing out clinical correlations. We also needed to develop a spiral curriculum to enable revisiting, to increase depth of learning and assist students with limited English skills.

Changing the mindset of the academic staff required us to be introspective with all these findings and the theory that supported change. A reflection on why medical students need to know Biochemistry and that it is different to how and why science students need to know Biochemistry, helped us realise that an integrated curriculum was needed. Although an integrated curriculum appeared fragmented to us, it would be a whole to the student when Biochemistry was integrated with Physiology and Anatomy, in the way that it occurs naturally in the human being. This change in mindset was not easy and I cannot stress enough, the usefulness of faculty discussions in arriving at a common platform for change.

Planning for major change based on all feedback followed, with a new set of learning outcomes being developed, discussed and edited, to fit a spiral, integrated curriculum. The new curriculum was run for one year, and staff feedback was discussed. Student performance at the final exam in the new batch was compared with two previous years of the old curriculum. The real test of efficiency will only be possible once these students reach the clinical years and after they graduate. Following feedback and theoretical input from medical education specialists, an exam blueprint was developed which strengthened the curriculum changes. Future planning has begun to examine better integration between subjects. Every year feedback will be collected, and action taken accordingly; the spiral continues.



Today, I hoped to impress upon you the value of reflective practice, applied at many levels. Let us strive to develop as effective academics working towards excellence, to the common good of society, through which our individual goals are likely to be met. If I have spurred many to take a step back to think, and some of you, to take up the challenge of change, then I have been effective. I believe that humility, which tells us how much we do *not* know, is what keeps us learning. I leave you with a quote, by David Mitchell.

“My life amounts to no more than one drop in an ocean. Yet what is an ocean, but a multitude of drops?” David Mitchell.

Thank you.

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