

## ***“Improving HE Student Skills for Work & Life Performance Readiness”***

Keynote Address by Professor Nelun de Silva, SLAIHEE Conference, 29 July 2022

### **1. Introduction**

I sincerely thank the organising committee of the Sri Lanka Association for Higher Education Effectiveness (SLAIHEE) conference 2022 for giving me the honour to address all of you listening on line to the keynote address of this conference.

I thank Professor Suki Ekaratne for his encouragement, which led me to accept this challenge.

Prof. Suki Ekaratne has been my greatest mentor who introduced me to the world of staff development when I was a senior lecturer at FOM, RUSL and when I registered for the first ever ‘Seniors’ SD course; Accreditation of Senior Teachers in Higher education (ASTHE).

The course conducted by Prof. SUKI, Mr Stephen Cox among many other staff developers opened up ever expanding horizons of teaching and learning in higher education (HE) and changed my perceptions of the numerous **interactions between** teachers and students to promote deep learning and acquisition of skills in both undergraduate and postgraduate students.

Perhaps that is why I still continue to interact and teach medical students even much later in my career.

### **2. This talk will cover the following aspects**

- Background in the developing world
- Selected relevant theories
- Non-professional courses
- Professional hands-on education systems
- My experience with medical education and in medical microbiology
- What have we achieved so far through staff development & SLAIHEE?
- Where do the societal values fit in to HE?
- Resistance to change
- SHOULD Skills training replace higher education?
- References

### **3. Background in the developing world**

The importance of SKILLS development in education cannot be over emphasized since it can also reduce unemployment, raise incomes and improve standards of living. ....Therefore, you can see that changing education to help the youth develop skills, makes economic sense.

According to the World Bank report of 2021, one third of the working age population in low and middle income countries lack the basic skills required for them to get quality jobs, leaving them unable to achieve their full productive potential and limiting economic investment and growth in these countries.

We are aware that employers currently look for workers with applied skills rather than cognitive skills, due to the change in the labour market brought about by the 4<sup>th</sup> Industry Revolution.

Accordingly, today the graduates of Higher Education (HE) need to master not only professional skills of their job, but also various ‘other’ skills, that I will refer to in this presentation.

### **4. Some of the benefits of Skill Based Education are that it;**

- improves an individual’s employability and labour motility, and workers earn more money.
- increases the individual’s ability to adapt to changing technologies.

- Influences the path of national economic development, attract investment from abroad and promote growth.

Education and training generate other significant benefits too – reduced dependence on income support for the unemployed individuals, reduced incidence of crime, improved lawful behaviour and health awareness, among other benefits.

In India, our more developed neighbour, two thirds of surveyed educators indicate that their higher education system is unable to respond to changing societal needs. New technologies, ever- changing skills requirements and outdated curricula challenge their higher education system in its efforts to equip graduates with job-ready skills.

Possibly the same scenario exists here too in Sri Lanka (SL). With education and training of our youth redesigned and delivered to become ‘proper’, the problem of unemployability may be reduced and then, with further refinements, resolved.

5. In this setting we the academics in our universities have an obligation to the students as well as to our nation to focus on developing their skills to enable them to lead productive lives and contribute to the economic growth of the country. This is much more relevant and applicable in the non-professional courses, because the mantra that is being chanted in these courses is ‘employability’ and rightly so.

But one cannot change education without changing the **way** we teach to change the way students learn – these ‘ways’, we call **WTP** (Ways of Thinking & Practice), showing that thinking has to be accompanied with ‘doing’ (or practicing). So, a central question becomes – How do we **change WTP’s** of staff & of students? I told you earlier of changing **interactions**, a very powerful way to develop skills. For example, in Sri Lanka, Prof. Ekaratne has recently commenced a New Course to change lecturers WTP's, ISaTY (“Initiating Skills & Learning for Transfer in Youth” and I hope many of you will take advantage of this opportunity and change your WTP’s.

On development of a skill, first we need to remember that a skill consists of several ‘practices’ – for example, if we lack the self-decision skill, it can require developing ‘Executive Function’ skills, that include ‘analysis skill’ applied to other skills, and all of these can be ‘developed’.

## 6. Selected relevant Theories

There are the ‘Mechanical or Hard skills’, which are cognitive and technical, job-specific and discipline-specific abilities. But the skills that we need in HE which are important for work and life performance are as follows;

Life skills (WHO 1993)
Transversal skills (ISFOL,1998)
Generic competences (Tuning project, 2000)
Key competencies for a successful life and a well-functioning society (OECD, 2003; 2012)
Key competences for lifelong learning (UE, 2006)
21st century skills (Ananiadou & Claro, 2009)
Future work skills (IFTF, 2010)
Transferable skills (RPIC-ViP, 2011)
Soft Skills for Talent (Manpower Group, 2014)
Skills for Social Progress (OECD, 2015)

Figure 1. Proposed names to the term “soft skills” given in chronological order (Cinque, 2016)

**7. Of these, “soft skills” are important skills** that are pivotal to employability and career success.

These “soft skills”;

- are important not only for the labor market but for a complete human being, in order to achieve happiness in life
- are influenced by a person’s IQ as well as EQ
- application is not limited to one’s profession.

**8. Soft skills can generally be classified into three broad groups;** social, personal and methodological

Personal	Social	Methodological
<ul style="list-style-type: none"> <li>• Learning Skills</li> <li>• Professional Ethics</li> <li>• Self-awareness</li> <li>• Tolerance to stress</li> <li>• Commitment</li> <li>• Life balance</li> <li>• Creativity/Innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Teamwork</li> <li>• Contact Network</li> <li>• Negotiation</li> <li>• Conflict Management</li> <li>• Leadership</li> <li>• Culture Adaptability</li> </ul>	<ul style="list-style-type: none"> <li>• Customer/User Orientation</li> <li>• Continuous Improvement</li> <li>• Adaptability to Changes</li> <li>• Results orientation</li> <li>• Analysis Skills</li> <li>• Decision Making</li> <li>• Management Skills</li> <li>• Research and information management skills</li> </ul>

Figure 2. According to ModEs the most required soft skills in modern work places (Grisi, 2014)

**9. Transferable skills** – this is an area of major importance

The 5 transferable skills in higher education described by Stephon Brown, though more applicable to teachers, the students too will eventually benefit when their skills are transferred into a career or job that a student will choose to go into.

1. Composition and documentation

Clear writing and communication will be their strongest skills when students graduate and apply for their intended career opportunities when they write their progress for a portfolio or job application.

2. Problem-solving and critical thinking

Students should focus on critical thinking and problem solving when they graduate and become employed to turn problems into opportunities and foster a passion for solving problems.

3. Communication

Communication includes verbal and written disciplines. Verbal communication skills will enable students to describe technical concepts and interact with a wide range of people, from clients to peers to their

bosses.

#### 4. Leadership

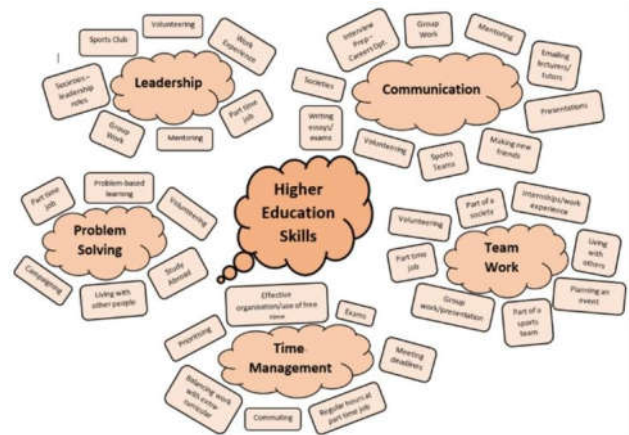
Taking the initiative to plan and organize events whether they be small or large, enable graduates to identify themselves as good leaders.

#### 5. Research/ inquiry

Being able to clearly focus ones query into an idea for qualitative, quantitative, or mixed results is clearly an advantage.

The author then adds a bonus point which is **Collaboration** where being able to collaborate, plan and work between teams and establish accountability, will allow graduates to bring

harmony into the workplace and perhaps become a popular person as well.



### 10. Non-professional courses - these may be considered as HE programmes that, as yet, do not target training for a particular profession

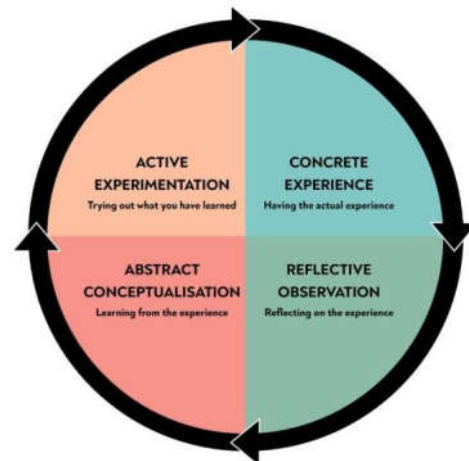
Here, we can ask what is the proportion of skills-trained youth in this country that emerge from courses such as social sciences, humanities, biology and other non- professional courses? How do the teachers set about developing skills to make these graduates employable?

Many of the graduates in social sciences end up as teachers in our education system. After obtaining a degree in social sciences or even an honors degree are they “well” equipped to teach students in different grades?

In the practical world, many of these graduates plunge into the role of a teacher head on and gain the experience while working their way through the perplexity of teaching students in various grades depending on the needs of the particular school and its students. Perhaps the more resilient ones pick up the pace and experience and turnout to be good teachers but what of the others who end up as mediocre teachers, disillusioned with the system, working conditions, remunerations etc. Are they the ones who end up as leaders in trade unions or actively participate in trade union actions at the slightest provocation, attempting to change systems, but sometimes jeopardizing the future of the children of this country?

**11.** To improve courses, we can build more **reliance on the KOLB’s experiential learning cycle**. This can lead to develop more innovative teaching and learning techniques, and for the learner to repeatedly practice on the experiential element, the ideal model being the inclusion of industrial training, work experience, elective programmes etc. Such experiences can be built into the study programmes where the students get attached to work places for a couple of months and get hands on experience. This paves the way for development of relevant skills with continuous monitoring by external and internal personnel.

In Kolb's cycle, effective learning is seen when a person progresses through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test a hypothesis in future situations, resulting in new experiences.



Teacher training courses are also of added value, to equip them with the necessary skills for undertaking the complex task of imparting knowledge, skills and values to the young.

**12.** There are many **Training Programmes for Teachers**; such a programme that was held in August, 2018 in Jaffna, introduced 106 teachers from 13 institutions to the framework of whole person education and different methods for effective teaching and learning. The resource persons emphasized that teachers need to bring more than academic qualifications into the classroom: they also need to develop skills for communication, human relationships, problem-solving, counseling, and other soft skills. Role play, games, and other exercises helped the participants practice some of these skills and, in the process, experience a student-centered environment. In small group discussions, participants identified the qualities of great teachers, which go beyond sound academic training to include being encouraging and enthusiastic, being willing to facilitate discussion and harmony in the classroom, and building confidence and self-esteem among students, among other qualities.

### **13. Professional hands-on education systems**

Medical education and other professional or hands-on education streams, like engineering, architecture, business management to a certain extent, are more amenable to skills development, or rather the 'monitoring' of the skill that is targeted. This is primarily because in these fields of education, it is really 'performance' education-training that we use while students are still with us. This makes possible a 'readiness' with which 'observability' of the 'skill/s' is made possible. In turn, some 'experiential' element is forced on to the training agenda, such as the Kolb Cycle I mentioned earlier.

Even these courses need 'continuous' improvement. For example, despite medicine being a professional course and guaranteed employability by the Ministry of Health in SL, medical education underwent major changes in its curriculum design and assessments to make a medical graduate more humane, empathic and holistic in his or her approach to a patient

Globally medical education is undergoing rapid changes in many fundamental ways. Curricula are becoming more integrated, both horizontally across science disciplines and vertically with the incorporation of earlier clinical experiences. Teaching sessions are being shifted to more active learning formats, and assessment is now a strategy for learning, as much as it has been a measurement of learning. At the same time, the role of the teacher is moving dramatically from deliverer of information

to facilitator of learning. These changes require core teaching faculty to become trained in possessing specific skills helping content experts become educators.

**14.** The Medical Faculty in Colombo (CUSL) initiated these changes in the 1990's, along the same lines. Since then, almost all the medical schools in SL have changed their curriculum design to be more integrated across disciplines. The methods of teaching and learning have changed to be more student oriented especially in the pre-clinical and para clinical stages with introduction of clinical training of students as early as possible in the designated hospitals.

It is now more than 3 decades since these changes have been in force in the premier medical schools of the country.

How have the public and the patients benefitted? I leave it to you to dwell on the many anomalies of the healthcare system in SL today.

- Trade union actions by medical doctors and holding patients to ransom
- Excessive commercialization of the profession
- Enormous support to the private healthcare sector by the public medical personnel
- Relentless campaign to close down private medical education seemingly due to low standards but in reality the monetary & commercial benefits to local doctors.

Society's main concern about medicine is lack of compassion. The components of compassion – kindness, courage, competence – are unquantifiable. Thus 'putting patients first', should be the goal of the ideal doctor.

#### **15. My experience with medical education and in medical microbiology – TLA's.**

In my specialty, Medical Microbiology, it is taught in the para clinical years. The emphasis has been to introduce Teaching & Learning Activities (TLA's) that would enhance student skills and contribute to the graduate profile of the many medical schools that I worked in, so as to;

- play an important role as an active member of the health care team and give leadership when necessary.
- effectively communicate with patients and their relatives for better management of the patients considering their psychological and social needs.

**We in the departments of microbiology contributed to the graduate profile by introducing** various TLA's as follows:

#### ***Computer assisted learning.* (CAL)**

Hands on practicals in Microbiology were fast dwindling and were replaced by more relevant clinically oriented exercises such as case studies related to infections.

The computer lab was used to conduct these exercises and to replace the traditional tutorials. The students in 2's or 3's would access PPT presentations of case scenarios related to infectious diseases, on the computers and discuss the answers.

#### **The theory**

CAL may supplement and reinforce more traditional learning and create opportunities to illustrate clinical situations in an interactive way. CAL has the potential to help students develop skills and

knowledge. Students easily adapt to CAL nowadays since their computer literacy is advancing. Continuous assessments too were introduced through computer assisted format for undergraduate as well as post graduate students learning Medical Microbiology where Objective Structured Practical Examinations (OSPE) were conducted using computers.

### **Small group discussions (SGD's)**

Archaic tutorials were replaced by small group discussions, in many of the medical schools, at Ruhuna, Rajarata, SAITM and now in Sabaragamuwa too.

Due to the lack of adequate numbers of teachers to act as facilitators, we took the entire batch into a large classroom and divided them into small groups and set the pace for students to discuss answers to problems, case scenarios etc. which were given as handouts or projected on the screen.

In addition we used techniques such as 'Flipped classroom', multi-disciplinary seminars conducted by students as well as research to improve teaching and learning by students (SoTL – Scholarship of Teaching & Learning).

When students engage in **such TLA's**, they **develop skills** in leading, being part of a team and managing conflict which are of value in a doctor's repertoire.

### **16. What have we achieved so far through staff development (SD) and SLAIHEE?**

The Staff Development Center (SDC) in the University of Colombo became a reality in 1997 with Prof. Suki Ekaratne as its first Director. The lecturer training programmes such as the CTHE courses commenced (for junior staff) and was then followed by the ASTHE course (for senior staff) and the MaTE course (for contract / temporary staff). Staff Development in the HE system was spread into other universities in early 2000, when Prof. Ekaratne coerced the UGC (as far as I know) to commence SD courses in all other universities and even trained staff in SD.

In that era, staff development for seniors was not compulsory and most enrolled in them for the sheer passion of becoming a good teacher and to gain knowledge on the many theories of teaching and learning in HE. However, it was compulsory for the junior staff and was a requisite for confirmation.

Unfortunately, some of the courses lacked skills training and were delivered lecture-style. Thereafter, to some academics the SD courses became a 'chore' to be completed and move on to more important stuff such as research, promotions etc. thus negating what SD is supposed to inculcate; the passion and the desire to be a "good" teacher - that are indeed possible when teaching skills are developed.

Have we lost the very essence of what SD was meant to do for teaching in HE?

However, with the birth of SLAIHEE in 2004, again spearheaded by Prof. Suki Ekaratne, teaching in Higher Education became more meaningful, together with the Scholarship of Teaching & Learning (SoTL). The SLAIHEE conferences were started and by introducing such a HE SoTL-related research-sharing forum to Sri Lanka, this annual conference continues to provide young academics encouragement to research further into what HE teaching methodologies they have learnt and put into practice, so that they could collaboratively improve Sri Lankan Higher Education.

Another pioneer in the field of Staff Development was Dr Ms Shrinka Weerakoon who followed the ASTHE

course at SDC/CUSL and then having joined the SDC, guided, mentored and nurtured many academics through the CTHE courses conducted by SDC, Colombo till she, very sadly, and untimely, passed on in 2017.

### **17. Where do the societal values fit in to HE**

It was a unique experience for me when I retired and joined the private medical school of the South Asian Institute of Technology and Medicine (SAITM). I taught Medical Microbiology starting from to Batch 01 to batch 12 at SAITM. The students were transferred to KDU after SAITM was closed. I had the privilege of teaching the last 2 batches 13 & 14 too, when I joined KDU thereafter.

Teaching students who have come from quite a different background made me identify and analyse the relevance of societal values in higher education. The experience was quite enriching where one encountered students who were receptive, would question and challenge their teachers and we were kept on our toes at all times. As expected the SAITM students who have graduated have done so with flying colours and those in the healthcare system too are performing equally well.

Another experience I gained at SAITM was that departments worked with academic staff only, sans any support staff such as clerical, managerial, technical etc. To our pleasant surprise the system worked very well since the responsibility for TLA's, assessments and procedures were ours. If things went wrong, we were responsible and took ownership. This is a model I would recommend to the overburdened HE system with an enormous array of support staff, which I believe is crippling the system financially.

Quality of life can be enhanced because society functions better with individuals who have better cognitive skills. The "values" of students occupy a central position in the cognitive system and on student's personality, because it includes components of knowledge, affective and behavioural, determining their attitudes and motivations.

### **18. Resistance to change in SD**

Resistance to change is commonplace and SD has to take this into account to be able make any meaningful change in our HE. This was well illustrated in a recent article that appeared in a local newspaper, where a very senior academic ridiculed the approach used in a Work Shop (WS) to introduce "intended learning outcomes" to academics teaching humanities and social sciences in our university system. The workshop was entitled "How to incorporate employability skills into teaching and learning in University Education using the Sri Lanka Quality Assurance Framework (SLQF)." These workshops were conducted by a group of academics who have long been engaged with the SLQF process. Why was it that, instead of developing the teaching skills of participating staff, the resource person in this WS, underscored their intelligence and irritated the participants?

If we analyse the reasons why this academic and as well as many others in the system continue to oppose changes to bring "employability" or development of skills to graduates in these courses of study, there would be many, such as;

- incompetence and inadequate preparation of the trainer/s who did not do the work she was expected to do,
- the participants felt that it was 'insulting' to both their HSS discipline and to the participants,
- the insensitivity of the resource persons regarding views of senior academics brought about by



- ignorance of the subjects being dealt with,
- Lack of confidence in the university system,
  - very little recognition or acceptance of the knowledge that H and SS can bring to the UGC mediated Quality Assurance process,
  - Low input of H and SS perspectives to the formulation of level descriptors of the quality assurance framework.

Therefore, resistance was built against doing what the trainer (and the training) had targeted. This is very instructive to all of us, as it shows that developing skills of HE staff is not what everyone can do.

If a system change is warranted to produce employable graduates in the non professional courses, the process of training for this change itself should be skilled, i.e. brought about in a manner that is acceptable to the relevant academics. The solutions should be facilitated so as to spring forth from them rather than being forced upon them through various means by the so called 'outsiders' as WS resource persons.

We may then see a meaningful change in the system.

#### **19. And the final question.....SHOULD Skills training replace or be tied closely to higher education?**

**Skills Training** is the process of learning for job or industry-specific skills and it is usually done in a short period of time. In contrast, in **Higher Education** it is done through college or university but via subject-related teaching where, often, it can be difficult (both for teacher and student) to link subjects that are taught with the skills required for future work and well-being - and so, require special training of HE teaching staff.

Either of these pathways ultimately leads the learner to the employment sector. But considering the duration of the course, the financial aspect, some students prefer to choose short term vocational training for immediate employment benefits.

#### **But will skills training be helpful for long-term employment goals?**

A recently published article by Harvard Business Review mentions that Skill Training can never be a substitute for higher education. In the context of the 21st-century workplace scenarios, **“What they need are applicants who can learn on their own in real-time to do tomorrow’s work and even for the jobs that have not yet been invented.”**

In HE, the prime focus is given to holistic development, it helps students to engage in various activities that involve physical, emotional, social, spiritual, and intellectual aspects and assist to adapt to challenging work environments and culture.

We have known since time immemorial that there are no shortcuts to nurture intra-personal skills, analytical skills, critical thinking, and social skills (inter-personal skills). These can only be developed through proper exposure, evaluation of competitive ideas, and feedback from the teachers and from fellow students. The guidance that a student receives from their teacher and from their peer groups in HE are invaluable and there has been no substitute ever found for that.

**Therefore, the most suitable solution, rather than creating a disparity between HE and skills training, is to include additional skill development programmes, certificate programs and industry- oriented training in the course curriculum of the HE system.**

This helps in creating a blended approach in the education system.

And finally, as we stand together on the brink of uncertainty and chaos that our country is facing, I would like to emphasize a few key points for us teachers to emulate in rebuilding our nation.

- Be a role model to your students - role models are few and far between nowadays.
- Be selfless and sensitive of the people around you in society, at work and on the roads and in public places
- Be attentive to the needs of the environment and nature
- Practice waste management, by reducing excessive use of polythene and plastics and disposable items and by recycling and reusing
- Be frugal and minimalistic in your day to day lives; especially now during this crisis.  
This is essential and is the need of the hour.

Individually each one of us have a role to play and get our act together to develop this country.

I wish you all, the listeners at this forum, a very bright, productive and meaningful future as you go forward in your chosen career pathways.

Thank you.

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