

Newsletter SLAIHEE

Volume 4

Edited by Suki Ekaratne

Material from this Newsletter may be used with due acknowledgement.

Opinions expressed are personal to the author/s.

This volume of the SLAIHEE Newsletter contains the 21 abstracts that were presented at the 1st **SDC / SLAIHEE Conference**, which was held at the University of Colombo, Colombo 3 on 31 March 2005, 9.30am to 4.30pm. The theme of the conference was "*Teaching to put Students First*". The keynote address on this theme was delivered by Dr Liz Beaty, Director – Learning & Teaching, Higher Education Funding Council of England (HEFCE).

(For more details on this conference, please see www.slaihee.org)

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Number 2, in above list, was a Poster Presentation. All others were oral Presentations. All 21 abstracts were accepted after peer-review.

ABSTRACTS**Improving the Quality of Learning by Teaching through Incomplete Handouts**

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Active learning demands the implementation of formal and informal learner centered teaching methodologies. While there are many methods of achieving active learning, we have chosen to accomplish the above by using incomplete handouts during lecture sessions in different study programs, based on what we learnt in the Certificate in Teaching in Higher Education course conducted at the University of Colombo.

The effectiveness of this incomplete handout method was evaluated by obtaining written feedback using a questionnaire from 2 sets of students (totaling 60) of two faculties in two Universities, across two taught subjects. In this method, students are given incomplete handouts to be filled, after having first conducted the relevant theory component.

In both sets of students, over 84% found the task of filling incomplete handouts to be interesting (84.6% and 95.0%, in the two sets), over 90% felt they were challenged (90.0% and 92.3% in the two sets), over 90% felt the method to have emphasized the major points (93.3% and 90.0%). Over 85% of the sampled students from the two universities found the incomplete handout method to have

motivated them to study (92.3% and 85%), while 100% of students in both universities found that it made their understanding of the subject easier.

On the basis of the results obtained it is concluded that incomplete handouts lead to greater subject understanding by promoting active and deep learning, through challenging the students and by making the subjects interesting and motivational. It would be interesting to examine the reasons why a minority of students in both universities found this method not to promote active and deep learning in them, and whether other methods could be deployed for providing them the impetus for their active and deep learning.

Identification of Student Employable Skills and Staff training needs in Biological Science Study Programme, University of Ruhuna

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Presently student intake for the Biological Sciences study programme in the University of Ruhuna is 130/year. It does not represent a cross section of all educational ranks for the biological science study programmes and all regions of the country. These students have lower Z scores (0.99 ± 0.24), come mostly from remote areas of the southern region, and generally lack exposure to modern technologies and language capabilities. It

is felt that these characteristics of the incoming student population prevent them from experiencing the multicultural, multiethnic and multiregional exposure during their university life. The location of the university in the southern end of the country and the existing curricula being mainly centred on theoretical knowledge, further cuts off students interacting with the local community, as well as from other higher institution communities, professional organizations and industries.

A questionnaire and interview-based survey was carried out in 2004 involving 4 stakeholders (*i.e.*, students, graduates, staff and private sector employers), to identify suitable strategies and approaches to improve the skills of students. Analysis revealed students to lack employable skills such as leadership qualities, communication, presentation and management skills and teamwork capabilities. All stakeholders identified that including more field based studies and industrial training in the curriculum as being one of the most effective strategies to overcome this problem, compared to other approaches such as increasing subject combinations, job orientated course units and development of infrastructure facilities.

To give opportunities for students to develop these skills through such programmes, suitable staff training programmes should be conducted as a need of vital importance.

The Application of Constructive Alignment for Enhancing Learning Performance of a Group of Potential University Entrants: A Case with the Presidents' Guide Award

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University lecturers consistently complain that learning and skill development of incoming university students become difficult because they do not have the appropriate learning approach. This presentation discusses a case where this learning approach was remedied through adopting a different approach to teaching and learning, and the importance of teacher training in adopting more effective teaching strategies.

The most senior Girl Guides comprise a school cohort at the stage of university entry. As a teacher ('*Sylvana*') in the Girl Guide movement, for the past three years, I was tasked with preparing such Guides to face the oral presentation for their final achievement – the Presidents' Guide Award. This is a 20-minute presentation followed by a discussion with 5 senior Guide Commissioners, totaling about 40 minutes. The pass rate was less than 50% each time, up to date, despite a continuous and intensive lecturing-style approach giving the trainee Guides all possible questions and answers. On learning the Constructive Alignment approach in a teacher-training course (CTHE), I applied it in teaching the Girl Guides, and almost instantly it made a big difference and improved pass rates to 80%.

This newly adopted Constructive Alignment teaching-learning approach assumed that 'if students are to learn *desired outcomes* in a *reasonably effective manner*, then the teacher's fundamental task is to get students to *engage in learning activities* that are likely to result in their achieving those outcomes' (Shuell, 1986). The desired learning outcomes were framed as the objectives which students (*i.e.* Guides) were expected to achieve at the end of their lessons. To ensure that the students achieved these outcomes in a 'reasonably effective manner', the teaching-learning activities and assessments were designed to be in line with the desired outcomes or objectives. The higher pass rates students achieved reflected the 'reasonably effective' teaching and learning. To get the students to 'engage in activities', they were taught so that learning-teaching activities, learning outcomes and assessments were mutually supportive components in this constructively aligned teaching. In the light of this student-performance improvement brought about by a newer teaching approach, the significance of adopting this Constructive Alignment teaching-learning approach to the university setting will be discussed.

Correlation between Continuous and Final Assessment Marks in a Student-centred Restructured Curriculum

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A student centred curriculum with emphasis on continuous assessment was introduced in the Faculty of Medicine,

University of Colombo in 1995. In paediatrics, 40% of the mark is from continuous assessment, based on marks given for clinical presentations, written case discussions, investigation oriented practicals, ward and lab procedures, attendance, and an objective assessment of attitude. The balance 60% of the mark is obtained at the final MBBS examination, which consists of a clinical component consisting of one long case and two short cases, and a written component of 40 MCQs and 5 SEQs.

Pearson's correlation coefficient was used to analyse how the continuous assessment mark of each student of the first 3 batches of this 1995 curriculum correlated with the final MBBS examination mark. The mark obtained for student attitude was also compared with the final examination mark. The marks obtained for clinical presentations, written case discussions and investigation oriented practicals were compared with the total mark obtained at the clinical examination, marks of the long case and written examination, respectively.

There is a statistically significant moderate-level correlation (r value ranging from 0.3 to 0.5) between the total mark of the continuous assessment and final examination, clinical presentation and the total final clinical mark, and the investigation oriented practical and the written examination mark. There was no correlation between the mark obtained for student's attitude and the final examination mark. There was no correlation between the mark obtained in written case discussions and the final long case mark.

A Preliminary Assessment of Enhancing the linking of Information Literacy in Teaching through discussion study groups

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This presentation is based on a study conducted with a group of university lecturers in Sri Lanka, the objective being to examine how they can link Information Literacy (IL) to their teaching process. The study was initiated because resource-based learning is a triangular approach of teacher, student and librarian, and the use of linked- IL in teaching could eventually break down barriers to acceptance of IL by students, if IL components are used and modeled effectively in teaching with the support of the librarian.

The study group consisted of 26 lecturers from disciplines of Chemical Engineering, Forensic Medicine, Geography, Natural Resources, Fine Arts, Social Sciences, Plant Science, English and Agriculture Economics who had from 1 to 19 years of teaching experience. There were two groups. Each group engaged in one 30 minutes session from January to March 2005, discussing the importance of IL in the university system, how to link IL to the curriculum, how to link IL with student assessment, the role of the lecturer and the university librarian in adopting and implementing IL in their work and how to implement IL with lecturers and university students. The Big Six IL model was introduced to the study group, explaining the six steps in information problem solving; task definition, information seeking strategies, location and access, use of information, synthesis and evaluation.

After the discussion session, the lecturers filled a questionnaire.

Before the discussion session, the number of lecturers who linked IL to their teaching was 8, and this number was 25 after the completion of the discussion session. The feedback of the participating lecturers showed that 96% of them were interested to adopt IL process in their teaching to enhance resource-based learning. These preliminary findings will be discussed with a view to improving learning activities so as to enhance the use of IL in resource-based learning.

Facilitating Learning Improvement in students of the Colombo Medical Faculty through Interventional Mechanisms adopted by medical faculty staff

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The increased entry of students from rural schools to the Faculty of Medicine, University of Colombo over the recent past has produced a widening of socio-economic and learning experience backgrounds amongst students. Certain student learning backgrounds do not readily support learning in the university setting and leads to poor student performance, especially in the first few terms of student life. Therefore, a voluntary Staff Group for Student Support was formed to help students to overcome their university-career commencement difficulties.

The different issues of entering students were identified by questionnaires, individual interviews and at tutorials. Students were found to encounter many problems in addition to financial and lodging. Other identified problems included suboptimal language capabilities arising from the medium of instruction being English, lack of appropriate study skills, lack of confidence, disharmony among parents or disability/loss of a parent, lack of guidance, and relationships among students.

Listening to students individually was the most effective method to reduce immediate stress, and it was necessary to maintain regular student meetings till the need existed. Effective longer term supportive interventions included directing them towards defined goals, making them develop confidence to overcome specific problems, getting students to make a timetable, and building up confidence in managing subject content. Assistance at group level was given through presentations on time management, mindfulness, and on how to answer SEQs.

Among the students ($n = 44$) who were regularly assisted throughout the Introductory Basic Sciences stream (IBSS) on this support programme, 29 (66%) successfully completed the IBSS examination. These results show that simple interventions by staff can greatly facilitate entering students to overcome learning impediments, and that such students need to be guided only over relatively short periods to become empowered to perform well in their academic learning activities. The presentation would engage others in discussing how similar situations are

addressed, and the application of the described interventions elsewhere.

Achieving Higher Order Cognitive Skills through Student-centered Learning in Teaching Data Analysis to Undergraduates

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Many statistics teachers have experienced that students' performance in data analysis is poor. Even the students, who perform very well in other statistics courses, face many difficulties in solving problems given in data analysis. This is mainly due to the fact that students must have a thorough knowledge in almost all the statistical concepts and techniques to solve a problem in data analysis.

The traditional method of teaching in the teacher-centred method was to teach, in the course or class, the theory/technique methods that could be applied, and the student would have to select the appropriate method and apply it after course completion. With this method, students showed weaknesses mainly in selecting appropriate theory/technique and interpreting the results obtained after applying a particular technique. Since these were the core cognitive skills expected from a statistics graduate, the teaching method was changed to a student-centred approach where the teacher played the role of a facilitator by encouraging teamwork and learning from peers. The changeover was based on new methods learnt at the 9-month ASTHE Course

(Accreditation of Senior Teachers in Higher Education) followed at the Staff Development Centre, University of Colombo.

Performances under the traditional and new methods were compared using the results of the data analysis course in 2001 and 2002. The mean mark under the traditional teacher-centred method was 44.28, a C grade. In contrast, the mean mark under the student-centred method that was adopted in 2002 was considerably improved to a B grade, and became 55.92. This is clearly a significant improvement (26% increase in percentage mark, $p=0.0001$), as well a jump in the grade for the entire class. Students' comments on the new method of teaching were also encouraging, and will be discussed in the presentation.

Nurturing Undergraduates' Skill Development through Internship Programmes - A Case for its inclusion in an Effective Strategy

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The aim of this paper is to share experience on the significance of incorporating Internship Programmes at the undergraduate level in Management Studies and Commerce by reviewing authors' own experiences in the Department of Accounting at the University of Sri Jayewardenepura.

In the B.Sc. Accountancy (Special) Degree Programme, students are sent to approved

training organizations under the supervision of a Supervising Member or a Senior Officer of the training organizations for Internships in Accounting and Finance for a period of two years (first year is optional), commencing at the end of second year examinations.

Data on 135 students at the end of the third year of their degree (only 59 students underwent training) were collected in 2004 December and 2005 January to March from a variety of sources: observations, interviewing students and practical training coordinator, Internship Evaluation Forms sent by the training organizations, assessment of students' assignments and presentations and other available documents.

Results showed that skills in the areas of applying theoretical knowledge into practical scenarios (technical skills), interpersonal relations (e.g. working with teams effectively), presentation and leadership potential were comparatively superior in students who underwent training, compared to students who had not become exposed to the internship training. However, degree of skill development was at varying levels in trainee students mainly due to the different levels of exposure they had received in training organizations. The skills that improved most were technical skills in Accounting and interpersonal skills. The skills that developed least were in written communication and time management (i.e., in university studies). The issues in the programme that need to be resolved in the future are minimizing subjectivity in the process of evaluating trainee students by the Department, poor lecture attendance of trainee students and inadequate level of University administration support for the Internship Programme. The resolution of these

requires careful planning and negotiation with the administration.

The above skill development seen in the trainee students reflect possible learning activities that we can include, as well as refine, for designing an overall strategy for developing undergraduate student skills, and would be highly beneficial to all students.

Enhancement of Student Inclusivity and Constructive Alignment in Teaching “Safety and Health” through the Factory Visit Method

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The Factory Visit method is used to enhance the learning process in the subject of “Safety, Health and Welfare Administration” in the Human Resource Management Degree Program. The Learning outcome of this method is to enable students to adopt an active learning strategy by examining how, and to what extent, classroom taught theory is being used as practice in the factory work setting. Thereafter, students reflect on their own learning and those of others, and proceed to “construct” a personal learning model to support their future work as a Human Resource Manager. This learning method also fosters the development of interpersonal skills such as team building, negotiation.

The Learning activity for making this method effective involved organizing a

factory visit to a selected manufacturing company for student groups in order to analyze, assess, judge and suggest a “best” system for Safety, Health and Welfare Administration for that particular organizational setting, by using theoretical knowledge gained from structured class room discussions. After the above-described visit, students engage in group-based assessment (such as a group report based on individual checklist and oral presentation), which increases inclusivity. A batch of fifty students following this method was selected to assess the effectiveness of this method at enhancing inclusivity. Feedback results showed that 25% considered that their feeling of inclusivity was enhanced through participating in this Factory Visit group work.

We analysed the alignment of learning outcomes, learning activities and assessment that we had followed in designing this curriculum, by giving samples of the course documents to two peers where 90% gave a positive rank to the presence of such alignment. We will discuss how such alignment was brought about, ways of enhancing inclusivity, and how it can be incorporated for teaching and learning delivery in other higher education subjects.

Congruity Analysis of Bloom’s Taxonomy with Curriculum Design for courses in Management Studies & Commerce, University of Sri Jayewardenepura

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Bloom's Taxonomy illustrates six incremental cognitive stages and is a widely used tool to develop educational outcomes. In combination with other tools, such as Constructive Alignment, it facilitates the development of a learner-centred university curriculum to achieve affirmed outcomes. In Sri Lankan universities, however, these tools are not yet widely used in developing courses and curricula, so that considerable room exists for developing a learner centred focus in university teaching.

The paper scrutinizes the congruence of Bloom's Taxonomy in the Faculty of Management Studies and Commerce (FMSC), University of Sri Jayewardenepura with some of its courses, and is an attempt to promote learner centred curriculum design by identifying the extent to which learner centredness has been embedded in curriculum development, course syllabuses and assessment methods. Eighteen courses in the common program of FMSC were sampled. The design elements (from their course manuals) and final examination papers of these 18 courses were matched with the progressively incremental cognitive levels of Bloom's Taxonomy.

The results revealed that in almost all the courses, only the first two levels of the taxonomy were applied without extending to the latter levels, and due concentration was not given to active learning elements. Further, no progress was visible when students proceed to the advanced levels of the degree program, to become congruent with higher cognitive levels of Bloom's Taxonomy. When course syllabuses were considered, only two syllabuses (11%)

were developed based on modelling learning outcomes. It is concluded that the revised curriculum of the common program in the FMSC can be improved so as to become congruent with higher levels of Bloom's taxonomy that supports active learning.

Based on the above findings, and the need to improve lecturer focus and awareness on curriculum design components aligned towards active student-centred learning, the presentation will interactively discuss the training and awareness interventions that can be carried out to enhance staff competencies on the use of tools such as Bloom's Taxonomy for effective curriculum design. A training course such as the SEDA-UK accredited Certificate in Teaching in Higher Education run by the Colombo University will be modelled to analyse the significance of such courses in improving higher education effectiveness in the Sri Lankan context.

Impact of Learning Styles on Student Performance at the Faculty of Management Studies and Commerce, University of Sri Jayewardenepura

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Students with different learning styles require different teaching/learning activities to learn the same thing (Smith 1997). Do students with different learning styles perform differently? This study tried to identify relationships between learning styles and performances of students attached to the Faculty of Management Studies and Commerce, University of Sri Jayewardenepura (FMSC).

Learning style is defined as “a preferred way of using one’s ability”, and by some others as “natural predisposition” or “a way in which a learner begins to concentrate on, process and retain new and difficult information” (Tobias 2001). Not everyone learns the same way as there are different learning styles, and Honey and Mumford (1986) identified 4 different learning styles, though there are other learning styles too (Ross and Schulz 1999, Rochford 2003, Sonnenwald and Li 2003,). People can have more than one learning style, but do tend to have a preferred style (Burdett 2001). Darling’s learning style model, on which this study is based, presents five pairs of opposite learning styles, *viz.*, visual - auditory, applied - conceptual, spatial - nonspatial, social - independent, and creative – pragmatic; accordingly, there are five different learning styles.

Data was collected through a questionnaire administered to a sample of 40 ‘random’ students of the FMSC that had a 40% response rate. 50% of students were visual learners and the rest were auditory learners. Best performing 18.8% were auditory learners. 56.0% were applied learners and the rest were conceptual learners. 66.7% of applied learners had scored GPAs above 2.84. 66.7% were spatial learners and the rest were nonspatial learners. 40.0% spatial learners had GPA scores above 3.36. 68.8% were social learners but 75.0% having GPA scores above 3.36 were independent learners. 81.3% were creative learners and the rest were pragmatic learners. Best performing 3 were creative learners.

Further work is needed to identify whether or not the university caters equally to learners of every learning style, and what corrective changes in teaching styles we

need to be undertaking – as teachers in Higher Education.

Developing Employability Skills in Students - A Case for Using Presentations as a Strategy

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High graduate employability is ensured by transferable skill building (Gibbs *et al* 1994), for which students need to practice, using opportunities that an aligned curriculum (Biggs 1999) provides through appropriately designed higher cognitive outcomes (such as shown in Bloom’s taxonomy), learning-teaching activities, and assessments. This paper will show and discuss how student presentations were used as a potent learning-activity tool to help develop particular skills.

Student learning activities were designed to engage them in 6 group presentations, using four modules in the Integrated Marketing Communication Strategy lecture series offered to Business Administration year-three undergraduates at University of Sri Jayewardenepura, and conducted by the presenter. Skill development was assessed using two surveys, separated by an interval of one year, having questionnaire-based and open-ended student feedback. The first, conducted immediately after module completion, assessed and captured ‘presage’ factors (*sensu* Biggs 1999), and students’ views on skills they developed in the modules. The second, an year later, after degree completion, assessed whether

students retained the same conceptions on their skill development, or, whether they had reclassified the significance of the previous course-based skill development after further learning experiences.

First feedback results (n = 35; response=100%), indicated that 100% of participating students had never made any presentation, were unaware of processes requiring mastery for developing competence in presentations, and that 100% conceptualized that presentations had helped them develop more than one presentation-related skill, and self-confidence. In the second survey (n = 33; response=64%), 71% indicated marketing communication as the most effective course in developing useful skills, citing that the 'learning product' of presentations helped develop the 'process skill' of self-learning. Presentation, communication, organizing, IT, learning, leadership, team management, interpersonal, creativity, negotiation, time management were identified as further skills they developed. 'Presentations' was judged (by 76%) as the assignment that helped them most to improve knowledge and skills.

Thus, student presentations can be input into a strategy for improving student employability skills, through being 'inclusive of key skills', 'supportive' and 'student centered', which are three important values of active learning (ASTHE 2000).

Student Feedback as a Mechanism to Improve Reflective Practice in Students from Multiple Disciplines and Universities

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Reflective practice is an important factor in effective learning. According to Honey and Mumford (1986) only some are reflective learners. In conventional universities students are not purposely directed towards reflective practice. But there is the possibility to make students adopt reflective practice, as a start, through a tool already used in some universities – open ended student feedback (OESF).

Student feedback on teaching is mostly used to analyse how well teaching/learning occurs, for which structured questionnaires are normally used, where all respondents provide information on selected/limited areas. Since most possible options are provided as answers, it does not require them to think deeply. In OESF, as an alternative approach, students are given the freedom to comment freely on teaching. This requires students to look back at teaching and their own learning, and to reflectively analyse how effective both have been.

OESF collected over the past 8 years (n = 429), by the presenter, from students of 4 faculties (Science, Management, Arts, Graduate Studies) in 2 universities (USJP and Peradeniya) were analysed, revealing that students (100%), when prompted by the need to provide OESF, had engaged in Reflective Practice of their own learning. Analysis showed that, in their feedback, students had explained aspects of teaching that helped them learn better (and worse)

(36.8% of students), how they had been able to develop skills and knowledge through teaching/learning activities (21.9%), their relationship with teachers (18.4%), the impact of class environment on learning (17.0%), areas that needed to be improved in teaching (6.3%, with 66.0% even making suggestions on how to improve teaching so they could learn more effectively), and further miscellaneous aspects.

If OESF is deployed regularly students are given greater opportunities to experience reflective practice, and OESF could then become a learning tool where they prompt themselves to reflect inwardly for improving personal development. If reflective practice is to be effectively internalised, students should experience the process of OESF more often, leading to better learning as well as to individuals, organizations and a society that becomes better empowered by reflective practice.

**Teaching to Put Students First:
Identifying Skills and Approaches
for Future University Development
Strategies**

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Students in our universities are mainly from low income families, as indicated by 90% of them (in 2004) having received either a Mahapola scholarship or a bursary to meet their living expenses, given that they are not required to pay university tuition fees. Their aim is to graduate and obtain an appropriate job that would

enhance their social and financial well-being.

Questionnaire surveys of graduates within a year of graduating were conducted to determine their employment rate, whether employment was in the state or private sector, the rank of employment, the extra-curricular activities they followed in university and in school, and courses they followed outside their subject disciplines. Thereafter, above data were analysed to assess factors that correlated positively with employment. The results are used to identify factors “why graduates are unable to meet their aspirations at the end of their university education?”, and “which skills should universities develop in graduates to meet graduate aspirations?”

Results confirmed findings from recent employment surveys that most graduates are employed in the private sector, and that private sector employment requires additional graduate-ship skills, such as excellent English communication skills, willingness to work long hours and ability to work under pressure. Results identified other skills that supported graduate employment and provided indications whether universities facilitated their development, such as;

1. Sports was a co-curricular activity positively correlating with employment. Sports participation declined after university entry (in 2003: from 45.1% to 19.4%; in 2002: from 39.8% to 13.8% - data are for students who graduated from Colombo University in 2002 and 2003).
2. Participation in Clubs/Societies and Drama/music at school and university also were positively correlated with employment.

3. On English skills that supported employment, 3.8% and 1.6% students who graduated in 2003 from Colombo and Sabaragamuwa universities followed English classes conducted by the ELTUs (English Language Teaching Units), respectively, whereas 41.8% and 43.1% had followed classes conducted elsewhere.

These results suggest the urgent need to review university development strategies to include skills needed for employment, including the need to examine causes for low attendance at university-based ELTUs.

**From Lecturers to Excellent Teachers:
Preliminary Results in Evaluating
Scholarly Capacity of Humanities and
Social Science Lecturers in Sri Lankan
Universities**

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University lecturers cannot be effective teachers unless they themselves engage in continuing education through professional development. Often the activity of continuing education by university teachers is couched in more sophisticated terms such as research or scholarship, and separated from teaching. Ernest Boyer in 'Scholarship Reconsidered' initiated a lively debate on this dichotomy of scholarship and teaching, arguing that teaching is a truly scholarly activity. He identified discovery, integration, application and dissemination, as the four dimensions of scholarship. The concept

was subsequently elaborated and operationalised. Two studies are particularly relevant. The UNISCOPE model identifies the discovery, integration, application and dissemination 'functions' inherent in each of the more familiar 'forms' of scholarship - *i.e.* teaching, research and service, giving a comprehensive, though cumbersome, method for evaluating individual or organizational scholarship.

The second model, of HEFCE (Higher Education Funding Council of England), uses a simpler definition to identify a scholar as someone who (a) has been engaged in research at some stage in their careers, so that they can bring a critical analytical faculty to bear on the subject (Preparation), (b) continues to update his/her knowledge (Professional Development), and (c) always integrates new learning into his/her application and dissemination functions (Effective Teaching and Outreach).

The extent of academic staff scholarship can be assessed using measures for *Preparation, Professional Development, and Teaching Effectiveness*.

Preparation measures were compared using post-graduate qualifications (from Commonwealth Universities Year Book, 2002) of Sri Lankan academics with those of the similar Kerala State in India. Sri Lankan Engineering, Medicine, and Science Faculties had higher percentages of PhD, or equivalent level, academics. In Social Sciences and Humanities (SSH), only 44% of Sri Lankan academics had PhDs, compared with 78% in Kerala. Since management and commerce teaching is conducted in specialized colleges outside of major universities in India, comparisons in these subjects were excluded.

Professional Development analysis of SSH academics in Sri Lanka for 2004/2005, in 15 disciplinary categories of 11 universities, that was carried out as department-wise counts of professorships/associate professorships and publications is being completed. 'Teaching Effectiveness' measures, and identifying links between 'Teaching Effectiveness' and 'Preparation and Professional Development' were not carried out, and expansion of the present study, in this regard, would be discussed.

Enhancing Achievement of Learning Outcomes in Training Medical Students to Compile Medico-legal Reports through Activities in the Medico-legal Module

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This study analyses the effect of incorporating skill-based activities into a medico-legal module in order to enhance the ability of students to compile medico-legal reports during their two-week practical clinical attachment. The activities within the module to enhance these skills included photograph and slide demonstrations of injuries and injury patterns, lectures on injuries and their complications, and a clinical lecture demonstration where history taking, recognition and accurate documentation of injuries and determining the gravity of such injuries were demonstrated. Students were also taught about different weapons

and the injuries they produced, and how an opinion is formulated based on the clinical findings.

Student groups compiled medico-legal reports before and after the module. On the last day of each practical appointment, students were given case histories from which they compiled a medico-legal report. The quality of each report was assessed by a senior lecturer and by student peers based on a scheme of marking.

The mean \pm s.d. of the pre-module marks of the senior lecturer and the peer were 42.62 ± 5.396 and 44.47 ± 5.465 , respectively. The mean \pm s.d. of the post-module marks of the senior lecturer and the peer were 44.41 ± 3.569 and 45.34 ± 4.076 , respectively. Comparison of marks in the pre-module and post-module reports given by the senior lecturer showed a significant difference (z score = 2.094; $p < 0.05$), whereas no such significant difference was present in peer assessed pre and post-module marks ($z = 1.184$; $p > 0.05$).

Therefore, considering the improvement in marks as given by the senior lecturer, students had benefited significantly in their ability to compile medico-legal reports after following the module activities. This demonstrates that skill based activities incorporated into a theoretical module enhanced the practical ability of students.

A First Round Study into using Lesson Plans to Promote Development of Student Skills Effectively

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Learning deals with man's development and maturity which is considered one of the greatest means of education. It is not only acquiring information but also acquisition of skills-physical and mental interests. To be a good learner, he/she should develop his/her conceptual, technical and inter-personal skills. However, it is very difficult for students to achieve this task on their own, and requires the responsibility by a teacher to guide them towards a correct path of learning. Further, the guidance by the teacher is dependent on how well s/he can make use of available teacher-assistance tools of which a Lesson Plan is of considerable use.

Bloom's taxonomy describes six main levels of learning as well as verb examples that represent intellectual activities that can be incorporated in designing appropriate Learning Outcomes in Lesson Plans, taking into consideration the skills that need to be developed. An effective teacher can introduce different types of teaching activities in his/her lesson plans to develop student's skills identified in the designed Learning Outcomes.

The presentation is based on an analysis of university lesson plans to examine what lapses can be improved in their design. Four Lesson Plans were analysed to identify improvements in Learning Outcomes, Learning Activities and assessment to bring about the better design of Lesson Plans. Of the analyzed lesson

plans, 2 were deficient in proper Learning Outcomes, 1 in properly aligned Learning Activities and 1 in appropriately aligned assessments. Improvements of these common mistakes in lesson plans will be discussed to enable effective lesson plan design.

Learning to Identify and Practice Methods to Improve Effective Teaching in Higher Education

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Making Higher Education teaching to become effective for learning and skill development is essential in countries like Sri Lanka experiencing high graduate unemployment and student unrest. To improve this situation, and to give more life skills to the university students, deep learning strategies are important to motivate the students as well as the teachers. For teachers who are at the beginning of teaching, practicing these newer methods will put them in the correct path in their lecturing jobs.

Though there is considerable literature on various teaching and assessment methods to be practiced in higher educational institutions, teachers need not only to master the theoretical concepts and principles, but need to be able to put them into practice, and evaluate their effectiveness. This paper would highlight and identify how teaching strategies that were learnt in a teacher training course were practiced in the University for student teaching, and evaluated as effective

methods to transfer learning and skills to students. The main idea in these practices were to convert “knowledge of” teaching into “knowledge of how” to teach (Allen C. Ornstein, 1995).

After learning the methods and putting them into practice and evaluating them in my university teaching, the most effective methods for learning development and skill enhancement were found to be the use of learning outcomes, the outline plan, arranging the physical setting of the lecture room, visual aids, delivering lectures with learning enhancement interventions, giving assignments, forming small and large groups, peer observation, student feed back, self assessment.

In learning to practice these methods, the Learning Agreements used in the CTHE course were very useful and such a course is highly recommended for university staff to improve teaching.

The above findings confirm that there are different methods that can be tested and used effectively for making teaching and learning successful.

A Preliminary Study of Training Needs for Effective Distance Teaching and Learning based on Teachers’ and Students’ Perceptions of required skills

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The Open University of Sri Lanka is the only recognized university in Sri Lanka delivering study programmes through distance teaching. The teaching is primarily through printed text unlike in

face-to-face teaching in conventional universities.

The background of the student coming in to learn in the distance mode is an exposure to a teacher-centred approach throughout their Sri Lankan schooling career, making them comfortable with face-to-face teaching, but challenging them in this new mode of distance study. Therefore, facilitating students to develop skills necessary to study at a distance, while following the course itself, is an essential requirement in order to help students to become motivated and to engage in effective distance study.

This paper reports on the teachers’ and students’ perceptions of skills related to Distance Learning and to what extent teachers’ guide their students in this area. It is based on a case study carried out with 14 zoology teachers and 31 biology undergraduates. In-depth interviews were carried out with both teachers and students.

Findings showed that the majority of both teachers (79%) and students (94%) were unaware of the skills necessary to study at a distance. “Although the majority of teachers (79 %) were unable to give guidance to students on specific skills related to Distance Learning, they gave guidance on study skills based on self-identified skills that had helped them while being undergraduates in conventional universities.” The findings showed that the majority (86%) were focusing on the content or “transmitting knowledge” dimension rather than facilitating students on their learning process. This was not surprising since all the teachers had not had any training in teaching methodology on how to teach students at a distance.

Since this study was carried out with one cohort of students and teachers, the findings cannot be generalized. These preliminary findings, however, highlight the need for staff training so that the teacher focus could be changed to enable them to use more student-centred approaches, thereby helping students to improve their distance-based learning.

Peer Lecturing and Evaluation
A successful method for enhancing
student presentation skills and deep
learning

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The pedagogic philosophy of dons should demand teaching style to be highly interactive, engaging students in dialogue, including giving mini presentations to their peers. This presentation examines the effect of “peer lectures” on imparting knowledge as evaluated by student feedback and lecturer perception.

The study was carried out for two consecutive batches of about 50 students each. Areas to be covered in a 2-hour lecture were divided among groups of 5 to 8 students, so that 8 such groups would make 10-minute presentations on different topics to the class of 50. The remaining 40 minutes were allocated for answering questions, panel members’ comments and for the lecturer to make observations and comments. Each group contained a team

leader, timekeeper and assessor and these responsibilities were rotated among the team members during the semester. At the beginning of the semester, students were made aware of the nature of “mini presentations”, the significance of team effort in the active learning process and the role of each team member in the whole exercise. Eight peer-assessors served as the observation panel and two demonstrators scrutinized the presentation. Panel members’ assessments were based on preset criteria. The lecturer acted as an overall facilitator and monitoring person. At the end of presentations, each assessor was required to give two positive and two negative comments to each group, except for one’s own group.

According to the feed back based on a 1 to 5 scoring matrix, students’ overall evaluation was 98% positive, while answers to other questions like their consent on the introduction of such activities by the lecturer and whether the presentations helped them in active learning averaged more than 90%. More than 75 % students recommended that peer lecturing and evaluation be applied in selected topics which are more difficult to understand but of academic significance. Students’ performances in evaluation tests and presentation skills in later presentations were found to be improved with the progress in peer group lectures. However, quantitative studies are required to relate improved presentation skills to students’ performance in later activities including deep learning, examinations and the presentation of final year projects.

Evaluating the validity of an assessment method for Undergraduate Seminar Presentations

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Assessment of skills displayed at seminar presentations, viva-voce examinations, oratorical contest etc., where proof of the presentation or performance of the students is limited in time, imposes a danger of subjective decisions influencing the assessment process.

In this paper we illustrate the use of an established method, renamed as “Quantum Marking Technique” (QMT). In a QMT marking scheme, the award of marks is identified with specifically defined criteria, so that marks are allocated to a number of small packets (Quanta) of minimum 5 marks or an integral multiple of 5. Then each quanta of marks is awarded in a decreasing order to five different qualities; *i.e.*, excellent, very good, good, satisfactory and unsatisfactory.

This paper evaluated the validity of assessing undergraduate seminar

presentation using this QMT method. Three different examiners were appointed, one an internal examiner, the other an external examiner, and a third selected from the students themselves for peer assessment. Also, only a group of 5 students presented their seminar in a single day and the seminar was organised only once a week, over 10 weeks.

Results indicated that the QMT narrowed down the variability of marks, with the difference in marks of the three examiners ranging from 0 to 20%, for 87% of the students. The mark differences between examiners and student assessors ranged from 0 to 15% for 85% of the students, indicating that a defined marking scheme can develop competency in students at awarding marks. When all marks were presented to the students, they expressed confidence in this system. The assessment technique also helped to create a better class-room learning environment, while peer assessment helped to improve the leadership and questioning skills of students.

SLAIHEE

- **an organization of individuals committed to changing Higher Education in Sri Lanka;**

This volume of the SLAIHEE Newsletter contains the abstracts that were presented at the 1st **SDC / SLAIHEE Conference**, which was held at the University of Colombo on 31st March 2005. Previous volumes contain abstracts of other conferences.

SLAIHEE is a 3-year old organization of volunteers who want to change the nature of higher education in Sri Lanka. Its activities are designed to support educational development so that we produce lectures and graduates having self-confidence, self-esteem and the skills required to meet present-day needs. For this purpose, SLAIHEE organizes an annual conference, as well as other events and activities, on issues related to teaching and learning. The themes, and keynote speakers, of the conferences held so far are as follows;

	<u>THEME</u>	<u>KEYNOTE SPEAKER</u>
<u>First Conference</u>	<i>“Teaching to Put Students First”</i>	Dr Liz Beaty Director-Learning, HEFCE, UK
<u>Second Conference</u>	<i>“From Teaching to a Learning Culture - Providing Structures for the Paradigm Shift”</i>	Mr Stephen Cox CFTC Consultant on Staff Dev.
<u>Third Conference</u>	<i>“Developing Skills in University Lecturers and Students”</i>	Mr Deepal Sooriyarachchi CEO of Eagle Insurance

(For more details on these conferences and aims, please see www.slaihee.org)

SLAIHEE membership is open to permanent academic staff / faculty of degree-awarding institutions in Sri Lanka. Please visit www.slaihee.org for details of membership and a downloadable version of the SLAIHEE application form.