

F 259	F 264	F 269	F 274	F 279	F 284
F 260	F 265	F 270	F 275	F 280	F 285
F 261	F 266	F 271	F 276	F 281	F 286
F 262	F 267	F 272	F 277	F 282	
F 263	F 268	F 273	F 278	F 283	

F 259

Changes in hand ownership and tenure in the small holder sector in post-independent Sri Lanka

The alienation of state lands to the landless in rural areas under land settlement schemes in the dry zone and village expansion schemes in the wet zone, encroachment of state lands for agriculture and tenurial reforms of paddy lands have largely contributed to transform the pattern of land ownership and tenure in the smallholder sector in post-independent Sri Lanka . This study examines important changes in land ownership and tenure in the smallholder sector with regard to types of ownership of agricultural land tenure arrangements and social dimensions of both agricultural landowners and operators in the smallholder sector.

The agricultural censuses of 1946, 1962, 1973 and 1982, and other reports on agricultural statistics have been used to identify of land ownership, tenure categories and owners and operators.

One of the significant change in land tenure has been the increase of operators who are landless, operators having only home gardens and part time operators. The traditional land tenure practices such as *ande*, *thattumaru* and *Kattimaru* are also prevalent. The smallholder agricultural sector comprises an aggregate of more heterogeneous farming society.

A great degree of social Justice has been achieved with more equitable distribution of agriculture lands among the rural poor but a significant number of small scale farmers tend to move away from agriculture. Farming is less attractive to new comers due to low returns from farming.

F 260

Representation of women in the folktales of Henry Parker

An identification of positive and negative stereotypes of women in Sri Lankan folktales is timely since many of them are indiscriminately used in educational textbooks and moral discourses. Though some school textbooks have been analyzed for such purpose, very little has been done to analyse the folktales or folklore that are popular in Sri Lanka.

This study was initiated with the objective of identifying and naming negative as well as positive stereotypes of women that are found in the collection of folktales of Henry Parker (1910-1915) which have an ancient lineage.

Using Lasswell's formula (1948) of content research this study identified the different categories and social roles given to women and counted and compared the frequencies a positive or a negative stereotype of women appeared. Analysis of sexism showed the number of times reference is made to male and female characters indicating, that an inferior status was allocated to women in all three volumes.

The study reemphasizes the need for content analysis of all genre of Sri Lankan folklore, since folklore, per se is supposed to influence, to inspire to from the mass conscience of a host of writers not only in print media, but also in electronic media.

Any biased unrealistic negative representation of women should be re-examined with the help of modern scholarship on folktales its, exact nature, significance and function and the role in one's culture since they tend to impose false role models of women in the minds of the public, belittling women.

F 261

Heroin use among female sex workers

The paper contains descriptive primary data collected from the female ward of the Welikada Prison, Colombo. A non random sample of 19 heroin using female sex workers was interviewed face to face using a questionnaire for a survey on drug use among female drug offenders at the Welikada Prison during March 2000, which represented 12% of the inmates of the female ward.

Nearly two-thirds (64%) of the sex workers were aged between 31 and 40 years and 26% were between 26 and 30 years. Half of them (53%) were either cohabiting or separated 16% of the sex workers were married, 5% divorced. 21% were widowed. While seven (37%) of them had never been to school, 10% had completed G.C.E. (Ordinary Level). the majority of the sex workers (89%) had children.

The heroin using sex workers were multiple drug users. In addition to heroin, they had used cigarettes (95%), alcohol (31%), cannabis (26%) and hashish (5%). They had also experimented with psychotropic drugs such as flunitrazepam, diazepam and barbitone.

Nearly a third (37%) of sex workers had started on heroin below 20 years of age and 16% had started below 15 years. All of them were daily heroin chasers (Chinese method). However, 11% had experimented with intravenous drug use and discontinued it due to fear of contracting HIV. While 79% used between 4 and 6 packets of heroin, 21% used between 7 and 10 packets a day. A third (32%) had been treated for sexually transmitted diseases (STD) at the STD clinic in the Colombo Hospital.

F 262

Socio-cultural constraints to women's participation in the rural informal sector activities in Sri Lanka

The pattern of women's involvement in economic activities both within the household and outside is conditioned by a set of inter-related structural factors. In this context, rapidly expanding informal sector in Sri Lanka has potential to generate income for rural women because, most informal sector activities.

Data were collected by the means of survey, case studies and in-depth interviews in three main communities in Matale District. This study shows that women's low participation in the rural informal activities is determined by (a) their 'status group consciousness' based on the caste, kindred (=pavula) and gentry (=pelantiya) which are considered as closed groups and status groups in rural Sinhala community and (b) type of their household, whether it is nuclear or extended.

The study showed that even if the informal sector activities are not directly related to traditional caste-based occupations, status group consciousness influence women's decision in labour force participation. Furthermore, the participation is higher among women from nuclear families than from extended families. Finally, the study agrees that whatever influences made by push factors and pull factors, the socio-cultural constraints determine rural women's participation in wage work.

F 263

Supply Response Analysis in coconut production

Estimation of supply response is obvious for agricultural price and income policy. The product price, and input costs are important in determining the level of production of a commodity. The objective of this study was to determine the supply response of coconuts against major influencing variables.

The perennial crops provide challenges in estimating long term supply responses, with routine methods. The development of partial adjustment models solved many of the problems encountered in such studies, which is used in this study as well. This Present study examines the responsiveness of coconut production to changes in product prices, input prices and weather variables using time series data from 1970 to 2000. The biological nature of the crop identifies different time lags between dependent and independent variables. Therefore the econometric model was specified based on past research evidences as $Y_t = f(Pn_{t-1}, Pf_{t-2}, Fuse_{t-2}, RF_{t-1}, Y_{t-1}, u_i)$, where, Y_t = total coconut production, Pf_{t-2} , $Fuse_{t-2}$, RF_{t-1} , Y_{t-1} , lagged variable of real prices of coconuts, coconut fertilizer, fertilizer use on coconut and rainfall. Y_{t-1} is the lagged dependent variable to represent all the previous adjustments to price changes and, random u_i error.

The estimated model provides good statistical insight with $R^2=0.905$ and the coefficients consistent with economic theory. The coefficients for price and rainfall are significant at 5% level while the coefficients for fertilizer price and fertilizer use were not significant. This may due to the fact, that only 25% of the growers are recorded to use fertilizer as input in coconut and this has no significant impact on total nut production. The elasticities for short run and long run (values in Parentheses) with respect to nut price, fertilizer price and fertilizer use were 0.19 (0.3), -0.04 (-0.06), and 0.09 (0.14) respectively. Elasticity of production for rainfall is 0.65. The results indicate that the coconut producers are less responsive to output prices both in short and long run. As well known, the rainfall has a remarkable contribution on total coconut production

Therefore, policies regarding the changes in output price or variable input prices may have marginal impacts to boost the current coconut production in the short run, unless great changes are made.

F 264

Impact of irrigation development on food security: the case of inland fisheries in Sri Lanka

Large-scale development of freshwater fisheries in Sri Lanka coincides with the post-indent wave of irrigation development. Reservoirs are direct outcome of irrigation developments and fisheries programs mutually coexist in the environment. This study attempts to analyze the contribution of irrigation developments to inland fisheries by considering trends and pattern of spatial differences of freshwater fish consumption in Sri Lanka and relating them to trends of irrigation developments.

Data from Consumer Finances and Socioeconomic Survey of the Central Bank of Sri Lanka for 1981/82, 1986/1987 and 1996/1997 were used to construct indicators for different sample zones. Inter-zonal and inter-period comparisons were conducted to identify changing patterns of fish/meat consumption. Estimated population and district irrigation development indicators such as reservoir area, irrigated area and cropping intensity as a proxy to water availability were used to describe the trends in irrigation developments.

Fish consumption in rural areas is higher in 1996/97 than in 1986/87. Freshwater fish contributes to 41% of all fish and 15% of animal based foods consumed by consumers in irrigation districts. They also incur substantially lesser expenses for fish than consumers in other zones indicating freshwater as an affordable and easily available protein source. This abundance and affordability of freshwater fish in irrigations areas coincides with irrigation development activities. There is a positive correlation between per capita fish availability and GDP. This indicates the further potential of increasing fish consumption in the as personal incomes rise. It can be concluded that irrigation developments in Sri Lanka have contributed to national food security by providing the essential infrastructure for freshwater fisheries.

F 265

A study on the impact of share tenancy on agricultural productivity in the rice sector

The objective of this study was to examine the impact of share tenancy on use of agricultural inputs and land productivity. The nature of sharing arrangement for cost of production and returns may influence the level of inputs and thereby the level of productivity. Information required for the study was collected from a random sample of 88 farmers from Walaweyaya, Megdagamyaya and Karawalyaya in Hambantota District. The multiple linear regression technique was adopted to ascertain the existing relationship between yield and 7 independent variables viz land tenure, extent, fertilizer

weedicides, insecticides, seed variety and quantity of seed used per acre. This study shows that the productivity of owner cultivated paddy land is significantly greater than that of a share tenant cultivated paddy land it was found that the application of fertilizer is generally regarded by farmers as the most important input in paddy cultivation. It shows that the farmers get 0.288 bushels per acre for every additional one kilogram of fertilizer applied, provided that the other factors are constant and the quantity of fertilizer applied per acre varies in the range of 90 kg/acre to 210 kg/acre. On an average the fertilizer quantity used by owner cultivators is 8.2 kg to 39.8 kg more than that by share tenant cultivators. As a result, per acre average yield of owner cultivators is 7.9 bushels to 23.1 bushels more than that of share tenant cultivators. As a result, the total possible quantity of profitable output being added to the national output is reduced.

Due to disincentive from of tenancy arrangement prevailing the study area share tenant farmers do not opt to use additional inputs to use additional inputs to increase yield. It is found that this situation arises because of the variable land rent being paid to the fixed factor of production the land. The inefficiency of this share tenancy system arises because the variable cost incurred by the share tenant does not receive its full return. This study shows that the return to a fixed factor should be a fixed amount. Policy makers may take action to make the prevailing statutory variable land rent in force in Hambantota District a fixed amount of the yield. Then the decisions with respect to the various resources would be the same as under owner cultivators. Hence an understanding of the different tenure patterns in the country is important for formulation of agrarian reforms and agricultural policies.

F 266

“Social capital” and sustainable agriculture: role of a farmer company in developing countries

The concept of “Social Capital” has added a new dimension to the sustainable agriculture dialogue in developing countries. “Social Capital” argues for the enhancement of benefits of investments in physical and human capital. Accordingly, it shifts the entire production function upwards. These institutions influence the productivity of the small farming community operating at subsistence level.

In the case of small-scale agriculture in a Sri Lanka the farmer lacks market power, negating efficient operation of the rural economy. This study hypothesizes that if the “Social Capital” is organized into a farmer company, production can be cost-effective and efficient. This study examines the extent to which “Social Capital” enhances the ability of the poor to allocate resources efficiently.

The study of 160 households from four villages in the Dry Zone in Sri Lanka suggests that “Social Capital” via farmer company has made a significant contribution to household welfare. The farmer company has succeeded in pushing up producer prices in local markets so that members as well as non-members have benefited.

Multivariate regression analysis established that “Social Capital” generated via farmer company was a key contributor to household welfare of small farmer community. The

study shows that farmer company is the “glue” that holds “Social Capital” and “Conventional Capital Inputs” in the context of sustainable agriculture in Developing Countries.

F 267

Developments in harvesting and storage of rain water for domestic needs

Water requirements for domestic purpose in Sri Lanka are met from various sources. It is common for users to go an alternate source when the supply from one source becomes insufficient or unsuitable.

The objective of this study was to examine the extent to which rain water is utilized for domestic purpose and to observe the trends and future potential of rain water usage. Natural resources of potable water are dwindling progressive due to pollution through increasing human activity on the one hand and due to salinity prevalent in some areas, on the other. In view of this, attempts have been made to find alternate sources of water for domestic use. Many countries have recognized the use of rain water as one alternative despite its drawbacks. In Sri Lanka too there has been a tradition of rain water utilization for domestic purpose, although in a limited way.

This study was carried out in the Madurankuliya area in Puttalam District. The area covered contained approximately 200 houses. Nearly all households resorted to one or more rain water harvesting methods indicated here. The common storage methods are : tanks at ground level, tanks partly below ground level, tanks supported on pillars, tanks on sun- shades, and natural and man made wells and ponds, and large containers.

The harvesting methods commonly used are collection from the roof, collection from tress, use of large polythene sheets or other material in open spaces and the diversion of rain water on surface to storage ponds.

The efficiency of these harvesting and storage methods varies, depending on the amount of rain fall, rate of evaporation, capacity of tanks and the usage of rain water. More attention should be given to improve efficiency of collecting and storage methods.

F 268

Study of the factors affecting the sustainable management of tea lands in the Sinharaja periphery

A study was conducted on the factors affecting the productivity of the tea smallholdings in the Sinharaja peripheral villages. A total of 38 randomly selected samallholdings from three revealed that most of the representative villages was studied by using questionnaires and field assessments. The data revealed that most of the respondents studied did not face a serious problem related to labour and credit. Only 42% of the respondents had received information from TSHDA. There was a wide variation in the

standard of cultural operations adopted by the farmers. The soil erosion level was considerably low and productivity in all the villages was higher than the national average. The recommended cultural practices, weeds, pests and diseases control measures, plucking, shade management, and fertilizer application were not practiced by significantly high proportion of respondents. The common pests and diseases that observed were shot hole bore blisters blight, wood rot, stem canker and lives wood termite. 40% of the tea plots were infested with termites, the most devastating pest in low country tea. 55.2% of respondents adopted improper methods of weeding such as the productivity of these lands.

In order to maintain sustainable productivity there is an urgent need to provide technical advice and other supports by the extension agencies. The effort will not only assist the tea industry but help protect Sinharaja forest.

F 269

Children with hearing impairment in Sri Lanka with special reference to Kalutara district

This study centres around an analysis of issues related to hearing impairment among children in Sri Lanka. Objectives were (1) To analyse the causes of hearing impairment, (2) To examine the problems encountered by school-age children with hearing impairment.

Case study methodology was used to gather in-depth data on causes of hearing impairment. Ten cases included in the study were drawn from a sample of seventy three children in six special units for hearing impaired children in the educational zones, Kalutara, Horana and Matugama in the Kalutara district. Data was gathered from a range of sources-growth charts, progress reports, medical reports and interviews with mothers.

Data on problems encountered by children with hearing impairment were gathered through in-depth case studies, interviews with teachers attached to special units in the sample and from two experienced teacher educators dealing with hearing impaired children. Further, records maintained by the Special Education Unit of the Ministry of Education, were perused. Following findings were made:

Low birth weight of the child, mother experiencing emotional trauma during pregnancy, parents being genetic relations, childhood diseases affecting the brain and hereditary factors appear to be related causal factors of hearing impairment.

In Sri Lanka, children with hearing impairment encounter problems related to speech, communication, perception, cognition and motions that have educational and social implications. These problems are compounded basically due to the lack of adequate services at national level to meet needs of these children.

F 270

Experiences of Sri Lankan teacher educators as they developed internet-based study materials as novice web designers

The recognition of the importance of educating the teachers in using new technologies in their teaching and learning process has influenced teacher education institutions in Sri Lanka to focus upon integrating Internet-based teaching and learning into teacher education programmes. Supporting this emphasis, the World Bank funded Teacher Education and Teacher Deployment project permitted a number of teacher educators from different teacher education institutions in the country to undertake staff development training in overseas Universities.

This paper focuses on the experiences of twelve Sri Lankan teacher educators as they developed Internet-based study materials while undergoing postgraduate training at the University of Wollongong, Australia. As experienced teacher educators, yet novices to the Internet, each of them developed a Web Study Guide (WSG). The study explored the design patterns adopted by these educators while they developed WSGs.

This research was designed as a naturalistic investigation and employed a case study inquiry. Questionnaire survey, observations, in depth interviews, analysis of WSGs and participants' reflective reports were the main data gathering strategies used. The study analyzed the ways in which the educators transformed information, the design patterns adopted by them, and the issues they faced.

Initially, the effects of limited knowledge and skills resulted in a limited focus on instructional strategies. As the experience levels increased, the participants' approaches to design become more inventive. The results stress the need of time, support and repeated experiences for educators to modify their conventional pedagogical beliefs and instructional approaches when adopting technological innovations in teaching and learning processes.

F 271

Introducing atomic structure to G.C.E. Advanced Level students through their active participation in the learning process and the development of a teacher's guide

Atomic structure, an important topic in the G.C.E. Advanced Level chemistry syllabus, includes concepts that are difficult for students to comprehend, and even experienced teachers face difficulties in teaching this section. In order to identify these difficulties a survey was conducted, among students and teachers. Students' questionnaire consisted of the questions which were focused to identify the abilities of applying, analyzing and synthesizing subject-matter into new situations, while the teacher questionnaire was aimed at understanding the difficulties experienced by them in teaching this sub unit. Lack of practical work and suitable analogies/models were identified as some of the important reasons for these difficulties.

These studies were incorporated into a teacher guide for the sub-unit on, "The existence of energy levels in an atom" under the unit on "structure of atom" in the A/L chemistry syllabus. Here the results of the survey were employed along with the current knowledge of this section. This teacher guide employed along with the current

knowledge of this section. This teacher guide emphasizes learning through active participation of students. Model building to understand shapes of orbitals, introducing an experiment on the spectra of elements and plotting ionization energies to identify trends are some examples of proposed classroom activities which facilitate the active learning process. Also, this teacher guide includes pretests, classroom assignments and learning process. Also, this teacher guide includes pretests, classroom assignments and self-assessment questions. Teachers will be able to introduce this sub in an interesting manner to students by using this teacher guide to overcome their difficulties.

F 272

School - based assessment practices in classrooms

School-based assessment (SBA) was introduced to Sri Lankan Schools as a part of a proposed national evaluation programme with the introduction of the 1997 education reforms. It has the characteristic of respecting the uniqueness of each student in learning. This study was carried out to find out how the teachers implement the SBA program in sixth grade classroom in teaching environmental studies. The sample was drawn from three schools from the educational districts Kandy, Kurunagala and Nuwara-eliya. In each district, a school from type 1AB, 1C and 2 was selected considering the easy access and convenience in conducting the study. Two classrooms from each school were selected for the study. In each classroom assessment practices of two units of the syllabus were studied by observing the teaching-learning situations, and detailed field notes were made. Students' answers for assessments and their written work were also collected. The students and teachers were interviewed to get a clear understanding of some of the happenings in the classrooms. The lessons and interviews were tape recorded to get accurate verbal data.

By triangulating the data collected from various sources, it was found that the teachers were not aware of the concept behind the SBA and considered it an additional burden to them. Performance records were not used by the teachers to help the students in their learning. Although these findings are based on 18 classrooms it is suggested that teachers should be trained to understand the competency level of students by involving them in a variety of assessment activities in in-service training sessions.

F 273

Teaching science; Misconceptions of students

Research shows that students learn science concepts only to a limited degree persisting their preinstructional conceptions instead of building scientific concepts. Hence, different approaches were adopted in science teaching. A major change was from the content approach to the process approach, including more and more activities in curricular material to help students in their learning. This study examined misconceptions of students in learning situations of two units of the year-9 science syllabus were observed by the researcher. Detailed field notes were made on how the teacher presented subject-matter emphasizing students' questions and responses of the teacher. The students were questioned while engaging in the activities and after. With their permission these conversations and classroom discourse were recorded. Before

starting each unit, a pretest was administered to understand the students' preconceptions. Naïve conceptions and misconceptions of students were studied by analyzing the posttest result and interviewing them. The teachers involved were also interviewed.

By analyzing the data collected from various sources, it was found that preconceptions of students were not connected in teaching to learn new concepts and misconceptions were persisted failing to promote scientific understanding which was mainly due to the lack of confidence of teachers in the subject-matter and poor planning of lessons. It is necessary to update the knowledge and skills of teachers to employ a variety of strategies in classrooms to let the students apply what they know to construct knowledge enabling them to develop meaningful understanding of scientific concepts.

F 274

Developing a teacher guide to help prospective teachers in teaching science

Prospective teachers show a preference to attend classes and do practicals in learning science, but have problems in translating what they learn in their teaching. In their lesson planning they pay attention to cover the content without considering the level of understanding of students. This paper is based on a part of a study on preparation of curricular material to teach science for meaningful understanding. Six prospective teachers who had their teaching practice in two schools in the neighbourhood of the researcher was selected for the study. The unit they selected for teaching was "Light reflection" to students in year-7,8 and 9. A pretest was given at the beginning of the unit to diagnose the level of students. A posttest was given upon completion of the unit to understand problems of students. After observing the lessons of these six prospective teachers, the researcher conducted debriefing sessions about their teaching to understand their problems. All the lessons and discussion sessions were tape recorded. Considering the problems and weaknesses they demonstrated in their teaching the researcher developed a teacher guide based on constructive approach to help them in year9 teaching. Prospective teachers showed an improvement in their teaching especially in trying to understand students' preconceptions, but there were weaknesses due to the lack of understanding of nature of science and the teacher as a facilitator. Teachers' knowledge about how students make sense of scientific concepts plays a major role in helping students to understand science.

F 275

A study of teacher focused interventions to strengthen the implementation of curriculum in Grade one

This study was designed to identify the problems and weaknesses of the teachers in implementing Grade 1 environment related activities with a view to strengthening their teaching capacity for effective implementation of 1997 reforms. An action research model was used in this study lasting one academic year where five researchers worked with four teachers in the implementation of educational reforms. The four teachers had

received training in reforms through in-service advisers. Group discussions, observations, and interviews were involved in collecting data.

Researchers were able to identify specific problems faced by the teachers in lesson planning and implementation during the first phase. A gap was discovered between grade one curriculum objectives and its implementation. Effective involvement of children in play and activities, attention for differently able children, use of oral English and adding an aesthetic touch were some identified problems.

During the second phase, researchers helped the teachers in lesson planning and to implement those plans while making them to reflect their own practices. They were also helped to adopt the teachers' guide to their own classroom situations. Opportunities were made to meet the curriculum developers to clarify their problems further.

Finally, teachers were able to prepare detailed and novel lesson plans and to implement them effectively. They were able to overcome most of their problems. Nevertheless there were instances where the teachers misinterpreted some science concepts and mismanaged activities. This shows the importance of guiding teachers continually. Hence, a mentor's role should be introduced to the system.

F 276

Can we justify the use of raw marks for admission to Sri Lankan Universities?

Standardization of GCE AL marks to prepare the common order merit list for selection to universities was abandoned in 1977. The raw marks continue to be used. Hence the objective of the research was to find the validity of the use of raw marks for university entry.

Arts students have a wide choice to select all the AL subjects unlike science students. Commerce students have the option to select one subject. Hence the AL results in 1986-87 and ten years later in 1996 of Arts/Commerce applicants and students selected were analyzed. In addition the results of AL 1997 under two syllabuses were compared.

The most popular subjects in late 1980s and ten years later continue to be same. They were Sinhala, economics, Buddhist Civilization, Political Science and Geography.

At AL 96, the five subjects with the high chance of selection were Arabic (58.6%), Islamic Civilization (52.1%), Islam (45.7%), Logic (32.9%) and Economics (32.5%). Ten years earlier the five subjects were Pali (59.4%), Buddhism (58.7%), Islam (37.8%), Islam Civilization (36.8%) and Buddhist Civilization (27.0%).

Standardization of marks benefited the aggregate marks of science students who sat the new syllabus by 12-18 marks over those who sat old syllabus. Standardized marks in 1996 were higher than raw marks for Economics, History and Political Science while low for Pali, Arabic and Islam.

Raw marks had an advantage for one group or for different subjects. Hence the authorities should explore the standardization of AL marks since it is already used to prepare the merit list of medical graduates for their appointments.

F 277

A framework towards spiral theory for learning

There are emerging views about whether the so-called scientific method is the only means for discovery of knowledge. In this sense, modern world is becoming very much interested in what is known as “alternative systems of knowledge”, leading to new paradigm about knowledge. We have been researching into Buddhist philosophy, which is a sufficiently unexplored source of knowledge in this context. In view of the current criticisms about quality of education, we have exploited Buddhism to devise a framework for learning in general. Our study has been focused into what is known as seven-purifications (“*sapthavisuddiya*”) in the context of realization of the world. In our research work, we have conceptualized the above idea in to framework, which comprises a six-step-cycle of learning. One attribute of learning is kept at the center of circle and also connected to all the six attributes. The seven steps/attributes are identified as *Discipline, concentration, Conceptualization, Realization, Application, Internalization* and *Validation*. The *validation* is kept at the center while others are on the circle and connected in the order given. In practice, many students learn without giving consideration for *discipline, realization, internalization* and *validation*. Most students attempt to get some applications knowledge without realizing concepts. Sometimes lack of understanding in concepts reflects as inability to apply them as well. Thus we emphasis on the importance of internalization step in the framework suggested. Further, validation concept has great importance as this allows rectification of knowledge. In practice, the framework can be repeatedly used forming a spiral of evolving learning.

F 278

Development of a conceptual network for undergraduate level learning of agricultural extension

Agricultural Extension subjects consist of abstract concepts, which are intangible and hence difficult to understand. Also concepts are learned separately under different subjects by undergraduates. Thus different subjects by undergraduates. Thus they have difficulties in learning concepts. The objective of this study was to develop a conceptual network, which would be a learning aid.

This study was confined to agricultural education, agricultural extension, agricultural sociology, basic communication and rural sociology. The target groups were students majoring in agricultural extension and agricultural economics. During the need assessment 85%, 90% and 98% respectively indicated difficulties in understanding

remembering and applying these concepts. Also 98% felt that a conceptual net work be useful.

The method adopted was: (1) Target group determination (2) need assessment, (3) identifying available conceptual models, (4) developing the conceptual net work, (5) identifying missing models, (6) developing needed models, (7) evaluation, and (8) modifying the net work.

Conceptual models were obtained from review of literature and discussions with professionals. Models, which were not available, were created. This network consists of models that were interrelated. It was presented as a book and as a computer-based network. In the computer based product a screen contains a model and its description and by clicking on a concept the user can move to a related model.

According to the evaluation, the overall quality was good (100%), 70% found it easy to use, but the other 30% found it difficult. In the future a glossary and more models should be added and made affordable to students.

F 279

O/L English as a measure of language competence for employment purposes

The GCE Ordinary level (O/L) examination is a national examination accepted for employment as well as for further educational purposes. This examination comprises three grades of successful attainment, viz: 'S' or simple pass, 'C' or credit and 'D' or Distinction. However although widely accepted as a benchmark, there has been no attempt to validate these levels of success in terms of compatibility for employment. This paper therefore seeks to establish a between GCE O/L results in English and those of another English test set to ascertain communicative for professional purposes.

The second test,, used as comparison is the Entry Test to programmes in General English at the Open University of Sri Lanka. This Test, like the GCE O/L is conducted into three categories. In the case of the OUSL Test however, the categories indicate which course the candidate is placed in - Beginner, Basic (lower intermediate level of proficiency) or Professional (upper intermediate level of proficiency). These courses are designed with employment purpose in mind, and hence incorporate communicative skills in English appropriate for employment/professional purposes. As candidates for the OUSL TEST are those who have completed secondary schooling, large numbers of these candidates have also sat for the O/L in English. Hence it was possible to establish a correlation between the O/L grade and competence for employment purpose as indicated by the level of placement in the OUSL Test.

The sample population so tested represented candidates from all nine provinces in the island, all major ethnic groups and both sexes. The outcome revealed that a mismatch existed between the results obtained at the O/L examination and the competencies required for effective functioning in the world of work.

F 280

A study of employee efficiency, food consumption and eating patterns

A private company has taken measures to increase the employee-productivity in various ways. Work-studies ^{8,9} indicated that there was a possibility of increasing the efficiency rate of employee to much higher level as are result intake and various other nutrients intake with food.

This study attempts to identify the relationship between dietary patterns of employees and their efficiency rate and what types of meals might influence a greater level of employee efficiency. A field survey was carried out by using a stratified random sample of the work force of the organization. Thirty (30) female Machine Operators were chosen under three categories. The three categories were High efficiency group, Low efficiency and regular over Time group. They were interviewed and using a questionnaire.

Although this survey did not suggest a relationship between the nutrient intake level of the production floor employees and their efficiency rate a, a contribution of nutrient level on the productivity was observed. It was found that the employee of the sample who were consuming supplementary vitamins in addition to their daily meals were likely to show a relatively higher efficiency level.

F 281

A study of R & D activities among Young Scientists in Sri Lanka

Sri Lanka has only 193 scientists and engineers per million engaged in R&D activities and 0.022% of world literature recorded in the science citation index of 1998. the present study investigated the availability of research facilities, career development opportunities and attitudes of young scientists towards S & T in national development. 1300 young scientists (aged <45 y0 responded to a structured questionnaire circulated through NASTEC, from June 1999 to August 2000.

Results showed that 86% of the young the scientists was engaged in research leaders. 565 of the research was collaborative work. 65% of them had instrumentation facilities on shared basis, while 22% had access to specialized facilities (eg. Mass Spectroscopy). Facilities for pilot-plant use or field studies were poor (<37%). Over 85% had easy access to library facilities. 53% of the research funds was from government sources. Only 29% of the work was documented as publications. 84% agreed that post-graduate qualifications were essential for research, while only 58% had facilities for career development.

53% of scientists felt that their superiors did not provide adequate guidance and support towards conducting their research. However, 99% of scientists felt that their research projects contributed towards national development, either directly or indirectly.

The majority of young scientists felt that they were actively engaged in productive research contributing to national development. However, lack of guidance and support from superior officers and inadequate facilities for career development, could be major constraints to reckon with in the future.

Competing in the digital age: will the internet change corporate strategy in Sri Lanka?

The study hypothesized that the internet is transforming global business-regardless of industry or geography and it enhances the possibilities for change in the corporate strategy in Sri Lanka and examined whether companies are rethinking their strategies, business models and processes to compete in the Digital Age.

Twenty-five large business institutes in and around Colombo were selected for the study. An e-mailed questionnaire, interviews with ten senior executives and the business homepages of the organizations were used to collect data. Participants answered questions designed to uncover trends and assess the Internet's impact across three areas: changes in the global marketplace, impact on corporate strategy and differences in the organizational structure, culture and business processes.

The most important finding from the research is that 92% of respondents say that the Internet will reshape the world marketplace by 2001. The study showed that companies across the borders are shifting gears to meet the challenges of the Internet. Because of the Internet 64% of the participants claim their organizations will be able to achieve their strategic goals, better as the technology helps them to improve customer satisfaction, reduce cost structures, reduce cost structures, globalize operations, foster innovation, and accelerate speed-to-market. At the same time. 32% of respondents are of the view that the Internet is forcing them to overhaul their strategies-or risk losing to quick and skilful competitors who have learned to harness the power of the Internet.

Survey respondents recognized the urgency o capitalizing on the opportunities afforded by these mega-trends and exploiting the rise of the Internet. While the business executives know they must transform their companies, most still have a long way to go capture the benefits of the internet with the skills necessary for jobs in the new digital economy.

Participatory management leads to ownership and commitment towards the certain of effective schools

School - Based Management, with community participation, is a concept born in Australia in 1967. But even by 2001, not all-Australian systems fully implemented SBM. Yet, since the 1990s, it has become an international phenomenon, spreading to most school systems. This paper, based on research conducted in three Australian school systems (ACT, Victoria and NSW) and Leicester in England, evaluates its impact. Findings are based on data collected the findings of effective schools research that partnership between parents and schools lead to the motivation of both staff and students, resulting in effective schools.

Data analysis suggests that participatory management lead to ownership and commitment based on what the community together believes and shares, in accomplishing for their children. Within decentralized and devolved school environments, leaderships is nothing more than a means to make things happen, through the exercise of wit and will, to work together in achieving the goals of the shared vision.

In the midst of rapid changes brought on by advances in information technology, globalization and the spread of democracy, public schools around the world are facing new challenges, necessitating the pooling of available resources. Participatory management contributes to create safe, healthy and positive teaching and learning environments, leading to better quality, effective schools. In the final analysis, SBM makes schools more autonomous, flexible participatory, effective and accountable in meeting the societal needs.

F 284

Effectiveness of strategic management in reaching organizational goals: the case of Sri Lanka Telecom

Strategic management that considers changes and development in the business environment uses a complex and detailed analysis of the organization and its interrelations with the business environment. In contrast, conventional management approaches focus mainly on the internal details of the organization. Sri Lanka Telecom was brought under new management and to evaluate their effectiveness in reaching organizational goals. Case study approach was used to conduct the stud. Data were collected through interviews the senior management.

Sri Lanka Telecom, after privatization has identified several new organizational goals. The principal focus of these goals is identified as increased customer satisfactions, contributing to economic and social development of the country and maintaining higher employees' satisfaction. The company introduced new strategies to reach these goals. It has changed its organizational structure to suit the modern competitive business environment and also introduced new products. Increased employee satisfaction also has facilitated implementing new strategies and helped reaching new goals. Number of new telephone connections made per year has recorded an increase of 200 percent from the level before the new management is one indicator to show the increased efficiency of the organization. The study shows that the company has successfully used strategic management techniques to increase efficiency of management and to reach the organizational objectives.

F 285

Sri Lanka Rupavahini Corporation's media policy on its programmes: an appraisal

It is important to understand the nature of the policy decision marking with regard to the programmes, practiced by the Sri Lanka Rupavahini Corporation (SLRC), which manages the national television channel 'Rupavahini'. This is all the more necessary

since SLRC has evolved to be the main and the largest television network in the Island. However, no substantive academic attention has been paid on this vital area recently.

This paper is an outcome of a preliminary study which examined as to how policy decisions are made with regard to SLRC's TV programmes, what guidelines are provided in this connection and the nature of the related authoritative powers in operation. The methodology used was the study of secondary data which included official publications such as the Constitution, Acts, Codes, International Treaties and relevant information.

The study shows that there is no written a clear-cut media policy practiced by the SLRC with regard to its programmes. It also appraises the guidance provided by the SLRC Act no 6 of its Programmer. Code and the Code of Advertising Standards and Practice. The study emphasise the possible negative impact on balance, impartiality and credibility of information of the programmes that are aired by Rupavahini as result of the centralized power on the Minister in charge, in to policy and decision making.

Also, according to the study both above mentioned codes - the Programme Code which is meant for programme planners and producers and the Code of Advertising Standards and Practice which deals with the commercial messages that are aired by Rupavahini - transcend their limits to assist in the task of maintaining the quality of SLRC's programmes. It is concluded that much of the policy related decisions with regard to the SLRC's television programmes are governed by these three key documents.

F 286

A trial on a day school technique for social science undergraduates in the Open University

With a view to improve teaching quality a trial was conducted to determine whether a particular day-school-technique for social science undergraduates in the Open University could improve their academic performance.

Two batches of undergraduate students each following a communication course at intermediate and final level were selected for the trial. They were instructed to read four specified lessons before each day school. The tutor clarified the concepts in these lessons at each session and obtained information on the number of lessons read and students' own assessment of knowledge status before and after the day school. No such day-school-technique on communication courses was adopted in the previous academic year.

The final examination mean score was considered as a measure of overall performance. The researcher compared the mean scores on those courses with that of the previous academic year respectively. The same tutor was responsible for all aspects of conducting the two courses papers of the two years based on their content analysis showed correlation exceeding 70 percent.

In spite of day school attendees expressing on an average a knowledge gain from poor to good (on a scale of Very Poor<Poor<Good<Very Good) the overall performance of the students in the trial did not show an improvement at the final examinations. This may be attributed to the poor day school attendance and insufficient lesson reading observed in the trial. On an average the day school attendance was less than 46 percent and the attendees' reading level before each day school was only 50 percent. The results indicate the need to extend this study to all subject disciplines in the degree programme to determine how the above variables correlate to the final examination performance.