



# Staff Development Center

## Wayamba University of Sri Lanka

### **Performance Enhancement Through Personality and Life Skills Development**

#### ***Selected Topics***

#### **Importance of a Superior Personality For University Students**

*D. Debarawatta*

#### **Integrating Life Skills into the Academic Program to Enhance Student Performance**

*W. A. S. Lakmali*

#### **Personality Development to Increase Employability of Sri Lankan Graduates**

*H. N. N. Dilrukshi*

#### **Effective Teaching and Learning Through Latest Mobile Devices**

*R. G. S. Wijesekara*

#### **Information & Communication Technology for Language Learning**

*M. D. S. S. Kumara*

#### **Developing Life Skills of Farmers Through Effective Training Programs**

*H. M. D. A. K. Herath*



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#### **Publisher :**

#### **Staff Development Center**

Wayamba University of Sri Lanka  
Makandura, Gonawila (NWP)  
Sri Lanka  
2013

**ISBN : 978-955-4709-04-1**

**Edited by**  
**Udith Jayasinghe, Ph.D**  
**Ajith Jayaweera**

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                 Ajith Jayaweera**

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ISBN : 978-955-4709-04-1

Cover Page Design & : Kapila D. Ranaraja  
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***Performance Enhancement Through Personality and  
Life Skills Development: Selected Topics***

Ed. by Udith Jayasinghe and Ajith Jayaweera.

Makandura: Staff Development Center,  
Wayamba University of Sri Lanka, 2013.

106p.; 21 cm

ISBN 978-955-4709-04-1

i. 378.173 DDC 22

ii. Title

iii. Teaching methods – higher education

## **Foreword**

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It is with great pleasure that I write this foreword to this publication by the Staff Development Centre (SDC) of the Wayamba University of Sri Lanka for the 6<sup>th</sup> Intake of the Certificate Course in Staff Development.

The SDC has made its mark in training all categories of staff of the Wayamba University of Sri Lanka and has extended its services to outside institutions as well. The training of newly recruited academic staff members of National Universities including ours has been very effective in the past. The 6<sup>th</sup> Intake too includes a number of academic staff members from other Universities.

I congratulate the Director, Staff Development Centre and his staff for the active role played in training of academic, administrative and non-academic staff of the University and extending its services to outside institutions.

I wish the SDC of Wayamba University of Sri Lanka and participants of the 6<sup>th</sup> Intake all success in their future endeavors.

**Prof. S. J. B. A. Jayasekara**

*The Vice Chancellor*

*Wayamba University of Sri Lanka*

## **Preface and Acknowledgment**

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This compilation comprises of seven articles that explores the importance of developing personality and life skills of university students to enhance their professionalism.

Personality is a blend of temperament, emotions, principles and behavior. It is, in general, identified as a dynamic organization within the individual psychological systems that ultimately determine his/her unique adjustment to a particular environment. In a situation where it is complicated to specify the factors that affect the personality of a person directly, the first article of this textbook tries its best to explore why university students need a superior personality focusing on certain factors that can have a greater impact on producing an ideal graduate through the university system.

The second article emphasizes on a very timely theme; life skills based education to acquire knowledge and develop attitudes and skills which support the adoption of a charismatic personality throughout their lifetime. It is specifically written for adolescents to help them deal with social, political, psychological and physiological changes that take place in their lives which discusses Life skills based education focused on experiential, participatory and activity based methods to motivate students in their learning process.

University education can be considered as the core of higher education with its objectives of providing the trained resources to fulfil the ever increasing intellectual needs of a country. It is desired that at the end of university education, students come out as “productive citizens” who continuously develop themselves while benefiting the workforce, community and the economy. Employability is dependent upon a set of achievements, skills, understandings and personal attributes. The third article converse the importance of re-orienting the educational systems of universities examining academic approaches for personality development

to facilitate employability of Sri Lankan graduates to meet the challenges in current job market.

We are now living in an era where skill competencies in technology are indispensable for undergraduates as well as for educators. In the future, it is hoped that through the continued and rampant use of these technological devices, the communication gap between teachers and the students would be minimized for enhanced opportunities within the entire learning process. The fourth article reveals how latest mobile devices which are easily accessible to students can be used to develop an effective teaching and learning environment.

The fifth article talks of the use of various information and communication technologies for effective language learning. In the present day teaching, information technology, more specifically, the World Wide Web is an essential technological artifact that serves as an enormous resource. With computers and many other devices becoming easily accessible day by day, and language competency being an added qualification, teachers can make the best use of which improve teaching- learning process as well as to empower the learner to search for knowledge specially in learning a second language.

Field training and extension is an imperative skill for university students for both their career and personal development. Farmer training in this respect is education that most often takes place outside formal learning institutions which requires alternative adult teaching-learning techniques. It differs from education in schools because it is geared towards adult learning. Therefore, the sixth and final article of this book discusses the ways and means of conducting an effective farmer training program to enhance life skills of adult practitioner in the fields.

We would like to convey our very special thanks first to, Prof. S. J. B. A. Jayasekara, the Vice Chancellor of the Wayamba University of Sri Lanka for his continuance

guidance and support extended to us throughout his tenure to accomplish this difficult task. Our sincere gratitude is extended to the authors of the six selected articles published in this book for their hard work and commitment. Among many who have supported us throughout the process, we very specifically thank Ms. Menuka Udugama, Ms. Nimhani Perera, Ms. Madhavi Dassanayake, Ms. Dinusha Debarawatta, Ms. Apsara Amarasinghe and Ms. Erandi Wijesinghe – all attached to the Faculty of Agriculture & Plantation Management of the WUSL and followed the CCSD at the SDC/WUSL under our guidance – and Mr. Kapila Ranaraja (Computer Application Assistant) of the Dept. of Agribusiness Management / WUSL for their untiring efforts in bringing all articles into one format to produce the book in this fine quality.

**Udith Jayasinghe, PhD**

**Ajith Jayaweera**

*Staff Development Center (SDC)*

*Wayamba University of Sri Lanka*

*04<sup>th</sup> April 2013*



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# Importance of a Superior Personality For University Students

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## **Personality: The Concept**

University students are the cream of whole country, national capital and investment for the future. They are a handpicked crowd who are high in intellect.

Personality is a blend of temperament, emotions, principles and behavior. It is developed from the very beginning of a child's life. According to Allport, (1998)<sup>1</sup>, personality is the dynamic organization within the individual psychological systems that determine his/her unique adjustment to a particular environment.

## **Determinants of Personality**

According to Mohan (2003)<sup>2</sup>, it is difficult to specify the factors that affect the personality, but some can be identified as genetic factors, physiological factors, social factors, cultural factors and other factors.

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<sup>1</sup> Allport, G. W. (1998). *Personality: A Psychological Interpretation*, Routledge, London, 205.

<sup>2</sup> Mohan, G. A. (2003). *Educational Psychology*, Neelkamal Publications (Pvt.) Ltd., India, 253 – 275.

## **Why Personality is Important for Student?**

You have parties, functions, teamwork activities or programs etc. in your university life and day to day life. Have you ever noticed that there are some students who are surrounded by lots of friends all the time and others enjoy the party isolated? The difference between these two groups is mainly due to their characters, thoughts and personalities.

In the university you have to work as a group and in future you have to stand on your own feet by doing a job. Not only academic qualifications but also personality will be analyzed in an interview today. Specially, personality has an ability to conceal weaknesses and it will add a plus point for you and attract success to you in any work you are engaging. Therefore, it is important to a university student to have a good personality.

Personality development is the development of well-prepared pattern of behaviors and attitudes that makes a person unique. Personality development occurs by the ongoing relations of temperament, character, and environment.

## **Why Does Personality Vary from One to Another?**

One student is different from another. Numerous factors influence this, including the past and present life experiences, personal and professional environment, mental health as well as the ability to deal with life stressors.

In relation to university students, it has been shown that their personality is affected by the economic, political, traditional and cultural background, as well as by the objective and subjective inner forces within any student as an individual.

### **How to Identify a Student with a Good Personality?**

It is not an easy task to define the characteristics of a student with a good personality, but simply a motivated, dedicated, hardworking and responsible student can be identified as a person with good personality.

### **What is the Importance of Improving Personality?**

- *You can build up good relationships with others*

For example, have you ever wondered why some people have lots of friends while others committed to few? Or why some can easily adapt to any social gathering while others cannot? The difference is mainly due to the type of personality these people have. Try to observe public gatherings like parties.

You will notice how some are always smiling and going out of their way to talk to others, while, there are people who prefer to stay in one corner, all by themselves. If you are silent, others do not come to talk with you. Therefore, you have to talk with them and try to keep contact with them. Then only you can build up the relationship.

- *You can develop your confidence*

If you are too shy to speak when in a group, then this only means you lack self-esteem and confidence. While keeping the relationship you have to speak clearly, give answers for the questions assuredly when others ask. As a result of that, you will feel confident indirectly. Finally, person with self-confidence finds success.

- *You can develop your communication skill*

If your relationship with your family also is not good, then it means lack of communication and trust among others. Those who are great with their communication skills tend to have a better personality because they can easily converse with other people. Though not everyone is equal, the chance to improve your communication skills can be achieved through proper practice. All these can be changed if you attempt to improve and develop your personality.

- *You can achieve your targets in your life*

Today, there is a high competition for jobs. Soft skills are becoming as important as academic qualifications. Therefore, personality development is a point we should pay an intense concern. In other words, if we feel that there are some features in our personality that need to be worked on upon, then it can be done, without influencing others. At present, there is higher competition to achieve each and every aspects of our life. Therefore, we have to change according to the current situation.

## **Methods of Improving Personality**

Nowadays people are aware of personality development. Therefore, they try to take an approach in student, employee or professional level. In order to enhance students' personality, he/she will need to exercise it with high effort. Good personality cannot be reached at one-time. It is something that you need to work on for a period of time. Personality development cannot be achieved at once but if you put into practice within a long period of time, it will help you to earn something in to your life, which is 'personality'.

The following tips can be used to develop students' personality.

### **Be a Better Listener**

When we deal with others, it is important to be an exceptional listener. You have to look at audience or persons eyes, hang on their every word and make them feel important. There is nothing more appealing than having someone listen to you intently making you feel like you're the only person in the world.

### **Look Confidently**

In a gathering, when you deal with others, you have to impress that you are working very confidently and without any negative feelings. Shake hands with others firmly, make eye contact, speak less and with conviction. These are some simple actions that help you to maintain confidence. You will have to face different problems in your personal and academic life. Sometimes, it is difficult to accomplish the given task.

However, if you have confidence, dedication and positive thinking will help you to be successful in the given duty.

### **Speak in Style**

The way you speak or power of speaking plays an important role of good personality. Every person has unique style of speaking. However, when you speak, it should be clear and words should be pronounced as well as you should have good command on the language. When you speak it should not be in whisper or shout. For example, Power Point Presentations on symposium should be conducted in clear and audible voice.

### **Read More**

Knowledge is power. When you meet new people it gives you an opportunity to share what you know and to exchange your views with them. For that, you should know what is happening around the world. Normally we have very limited number of interests but, when we deal with others, it is important to expand our interests. Reading helps you to expand your interests, enrich the general knowledge and you to be a master of the field in which you are working.

To update your general knowledge you can:

- Read newspapers
- Watch informative programs on TV
- Read good & popular books

- Interact (interrelate, communicate) with smart people.
- Browse internet

### **Make You Meet New People**

Make the effort to meet new people especially those who are not known to you. Perhaps they might have great information and knowledge, therefore; talk with them more confidently. Always try to be with high energy and meet people with a positive attitude. Do not be stagnant. Try to explore and you'll discover new skills and good qualities about yourself unknowingly. Try to engage in activities, something new.

Nothing is impossible to a person with an open mind. It will help you to expose to different cultures and alternative ways of doing things. If you meet others, you can build up new relationships, companionships with them. It is one of good pathways to succeed our work because; we can take advices from well experienced people through our new relationships.

### **Be Yourself**

Each and every person has unique features, that uniqueness is what makes us interesting. Attempting to be a carbon copy of someone else not only falls flat, but also reveals a lack of faithfulness.

### **Have a Positive Outlook and Attitude**

Dark area can be lighted by switching on a light, likewise, smile warmly, spread good cheer and enliven others with your presence. Everyone enjoys the



cooperation of someone who makes him or her laugh. Comic relief is a much welcome and needed diversion at times. When you can add fun and light heartedness in gloomy setting, others will naturally be attracted to you.

### **Be a Good Supporter**

Being supportive is probably the most charming quality you can incorporate into your personality. It will help to win others in your surroundings. Try to support others when they need it. For example, Players love cheerleader because their encouragement helps them to enhance and inculcate beliefs stronger and stronger. Indirectly it helps them to pick up when they're down.

### **Dress Up Smartly**

A smartly dressed up person is admired everywhere. You can do it by observing successful people in any field like marketing, business, movies, media etc. ultimately, you can come to the conclusion, what kind of taste for dresses you should maintain. Good dresses also prove a stimulus for the wearer. It feels more confident and relaxed. A bad dress always appeals to inferiority complex. In well-reputed companies never hire a shabbily dressed person today.

### **Have Integrity and Treat People with Respect**

Try to be an honest and true to your word; it will bring you the admiration, respect and gratitude of others. Nothing improves a person's personality more

than truthfulness and respect ~ respect for others, as well as respect for you.

As academics, it is our duty and responsibility to produce perfect graduates from the university system. We can organize workshops, guest lecturers, outbound activities etc. to develop the students' personality. Ultimately, it will be helpful for production of ideal graduates from the university.

# **Integrating Life Skills into the Academic Program to Enhance Student Performance**

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## **Life Skill Based Education**

Life Skills Based Education (LSBE) is an interactive process of teaching and learning which enables learners to acquire knowledge and it also facilitates to develop attitudes and skills which support adoption of a charismatic personality throughout their lifetime.

It is specifically designed for adolescents to help them deal with social, political, psychological and physiological changes that take place in their lives.

## **Importance of Life Skills for Youth Development**

Adolescence is a transitional period which marks the transition from childhood to adulthood. Therefore, adolescence is a vital stage of growth and development in anyone's lifetime. It is characterized by rapid physiological changes and psychosocial maturation.

According to Lerner (2004)<sup>3</sup>, adolescence is typically viewed as the second decade of life beginning with biological transitions, for example puberty, and ending with cultural and sociological transitions.

Adolescence appears to be age related but not age dependent, i.e., adolescents may be over 20 years of age. LSBE is being adopted as a means to empower young people in challenging situations especially in transitional stages of adolescents.

As stated by Weisen (1983)<sup>4</sup>, life skills are numerous, and the nature and definition of life skills are likely to differ across cultures and settings. However, core set of life skills are identified by the World Health Organization for personality development and they refers as critical thinking skills / decision making skills, interpersonal / communication skills and Self-management skills.

For the better understanding of life skills, some definitions are pointed out here. Life skills can be physical, for example proper posture behavioral, for example effective communication, or cognitive, for example effective decision making (Danish and

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<sup>3</sup> Lerner, R. M. and Steinberg, L. (2004). *Handbook of Adolescent Psychology*. John Wiley & Sons Press.

<sup>4</sup> Weisen R. B. , Orley, J. , Evans, V., Lee, J. and Ben Sprunger, B. (1993). *Life Skills Education for Children and Adolescents in Schools. Introduction and Guidelines to Facilitate the Development and Implementation of Life Skills Programs*.

Donohue, 1995<sup>5</sup>; Danish and Nellen, 1997<sup>6</sup>). UNICEF defines life skills as “a behavior change or behavior development approach designed to address a balance of three areas: knowledge, attitude and skills”.

The World Health Organization (WHO) has defined life skills as, "*the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life*". All these definitions imply and include psychosocial competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others and cope with managing their lives in a healthy and in productive manner.

All of the above abilities encompass within individuals mainly because of their thinking skills and social skills. Thinking skills relate to reflection at a personal level, social skills include interpersonal skills and do not necessarily depend on logical thinking. Young people need both thinking skills and social skills for building consensus and advocating that something on concern within the society.

Life skill improvement within younger generation is a primary requirement for development of their

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<sup>5</sup> Danish, S. J. and Donohue, T. (1995). Understanding Media's Influence on the Development of Antisocial and Prosocial Behavior. Preventing Violence in America, pp. 133–156.

<sup>6</sup> Danish, S. J. and Nellen, V. C. (1997). New Roles for Sport Psychologists: Teaching Life Skills Through Sport to at Risk Youth, pp. 100–113.

personality. As it facilitates to mental, physical, social and emotional growth of young people, especially when they are preparing to live productively within their society which is encompassing already embedded social norms, traditions and customs. Here, teachers, parents, counselors, lecturers and educators having vital role to shape younger's life by making effective changes within individuals, if necessary through systematic training and guidance followed by life skill based education.

### **Key Life Skills Needed**

As quoted by Bills (1999), the life skills approach lends itself well to implementation across cultures and has been integrated into curriculum in various countries. For example, South Africa's Curriculum 2005, which introduced by the Department of Education, includes "life orientation" and skills for decision-making, critical and creative thinking, and effective communication. Also included are skills for developing healthy relationships and a positive self-concept. Some of the important life skills for graduates are explained below.

### **Self Awareness**

Recognizing ourselves is an obvious talent and therefore, would be able to identify their own strengths, weaknesses, abilities and desires. Self-awareness may help to be aware of our own feelings includes when we are getting angry, when we are stressed, when we are under pressure etc.

Hence, self-awareness is often a prerequisite to effective communication and managing interpersonal

relationships, especially, in undergraduates who need excellence skills on communication and interpersonal relationships. In addition, self-awareness may assist younger to develop empathy with others identifying personal strengths, weaknesses and vulnerabilities, clarifying personal values and beliefs, recognizing personal happiness.

Finally, this may lead one for developing self-confidence for day to day activities without looking others help. Becoming a self-esteemed person rather demotivating themselves specially be an assertive and not to be an aggressive in win-win situations. Develop self-awareness from the childhood is important to set personal goals for their own life.

Assertive people always looking for a change for betterment of their life and they believe on power of positive thinking. As undergraduates, students may need to acquire self-awareness as a life skill for guiding their personal life in an excellent path and to boost their performances not only throughout the university life but also in whole life time.

## **Empathy**

Hinton (2008)<sup>7</sup> has suggested that, empathy has long been an intrinsic part of the education system. Further he stated that, *“if schools are involved in intellectual development, they are inherently involved in emotional development”*. Empathy is the ability to

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<sup>7</sup> Hinton, C. and Fischer, K. W. (2008). Research Schools: Grounding Research in Educational Practice. Journal of Mind, Brain, and Education, pp. 157-160.

recognize and understand others feelings and emotions and there by people can be able to react to others accordingly and responsibly.

Empathy enables to connect people, building relationships with others and caring of other's needs, desires and feelings. Societal relationships have been developed during the university life rapidly among the students, students and the academic staff and students and outside experts. Managing personal relationships and gaining benefits to their academic activities from other people is a challenging task for every student.

However, sound experience on empathy will be helped to get maximum support from lecturers and outside experts to enhance students' performance. As the same, students are able to harmonize with other ethnic groups and other religious groups within the university without creating any social disturbances and conflicts. Therefore, empathy will be an essential life skill that should be developed by the undergraduates in order to achieve social well-being as a society.

Specially, after the graduation, appropriate employment opportunities will be opened only for those who wish to communicate strongly, those who seek to understand others, those who know how to use skills to influence a decision, outcome or circumstance. Emotional intelligence, understanding from another viewpoint, recognizing others feelings and responding appropriately to them, resolving conflict positively and improving non-verbal communication are empathetic communication skills the students developed by the time.



## **Critical Thinking Skills**

As quoted by the National Council for Excellence in Critical Thinking (1987), critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and / or evaluating information gathered from somewhere. Observation, experience, reflection, reasoning, and communication are act as guiding criteria for critical thinking.

Further, Critical thinking is self-guided and self-disciplined ability of making decisions by using highest levels of quality of conceptualization that generated within the ones' mindset.

As undergraduates, this should be an essential for their academic life within the university as well as for their professional life that they will engage in the future. Inclusion of attempts to develop critical thinking skills in the graduate profile of particular graduate scheme is one of the present requirements for getting forward students to formulate accurate, precise, sound and more relevant decisions without creating unnecessary stress to their mind.

Therefore, critical thinking involves intellectual values inherently build inside the students which influenced by the internal personal characters and external environment that they are more frequently familiarized.

## **Creative Thinking Skills**

According to Friedel (2006)<sup>8</sup>, creativity is multidimensional and still not completely understood by psychologists. Much research has given evidence that cognitive style of creative thinking is independent of cognitive level of creative thinking. Creative thinking is a combination of four components; generating new ideas, shifting perspective easily, conceive of something new and building on other ideas.

Isaksen and Treffinger (2005)<sup>9</sup> described creative thinking as making and communicating connections to think of many possibilities; think and experience in various ways and use different points of view; think of new and unusual possibilities; and guide in generating and selecting alternatives.

## **Problem Solving and Decision Making Skills**

Problem solving and decision-making are important skills for our lives. Problem solving often involves decision-making and it is especially important for management and leadership.

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<sup>8</sup> Friedel, C. R. and Rudd, R. D. (2006). Creative Thinking and Learning Styles in Undergraduate Agriculture Students. *Journal of Agricultural Education*, 47, 102-111.

<sup>9</sup> Isaksen, S. and Treffinger, D. (2005). Creative Problem Solving: The History, Development and Implications for Gifted Education and Talent Development. *The Evaluation of CPS in Gifted Education*, 49: 342-352.

There are many definitions for problem solving which include interchangeable concepts such as intelligence, learning, thinking and cognition (Mayer, 1992)<sup>10</sup>. Johnson (1972) defined ‘thinking’ as problem solving, Sternberg (1991)<sup>11</sup> “intelligence” as problem solving and Soden (1994)<sup>12</sup> ‘learning’ as problem solving. Problem solving helps us to deal constructively with problems in our lives. However, significant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain.

Decision making skills helps us to make decisions about our lives. This can have consequences for ones’ future sometimes. Good decision making requires a mixture of skills; creative development and identification of options, clarity of judgment, firmness of decision, and effective implementation.

### **Interpersonal Relationship Skills**

Interpersonal relationship skills are important to keep understanding in positive ways with the people who interact with each other. That may be help to maintain good mental health and social well-being. In that sense, keeping good relationships with family

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<sup>10</sup> Mayer, R. E. (1992). Cognition and Instruction: Their Historic Meeting within Educational Psychology. *Journal of Educational Psychology*, 84: 405-412.

<sup>11</sup> Sternberg, R. J. (1991). Giftedness According to the Triarchic Theory of Human Intelligence. *Handbook of Gifted Education*. pp. 45–54.

<sup>12</sup> Soden, R. (1994). Teaching Problem Solving in Vocational Education. London: Routledge.

members, friends and others who are interacting in the day to day life is vital for social harmony.

### **Managing Stress**

Managing stress involves identifying sources of risk appropriately and then recognizes how they affect us and finally take suitable actions accordingly to mitigate that risk and reduce the level of stress. Stress comes into our life due to so many responsibilities and commitments in the society, performing multiple roles in the social environment. Coping with the stress is a real challenge. However, people have an ability to manage their stress levels without causing mental imbalance in day to day life.

### **Effective Communication**

Communication refers both verbal and non-verbal communication. Good verbal communication skills are crucial not only for the students' learning while at university, but also for their future as professionals in almost any career path they will pursue. Communication is considered one of the university's generic graduate attributes. Generic skills are defined by a Higher Education Council (1992). Based on that document, generic skills are personal attributes and values that ought to be acquired during university education, irrespective of the students' disciplines.

Most of the students do not feel confident to make presentations and speeches in the public. Hence most of the universities have revised their curriculum to integrate students' contribution for the learning process where lecturer plays a role as a facilitator to their

learning process. Students' need to learn is how to communicate effectively and get the full attention of the listeners.

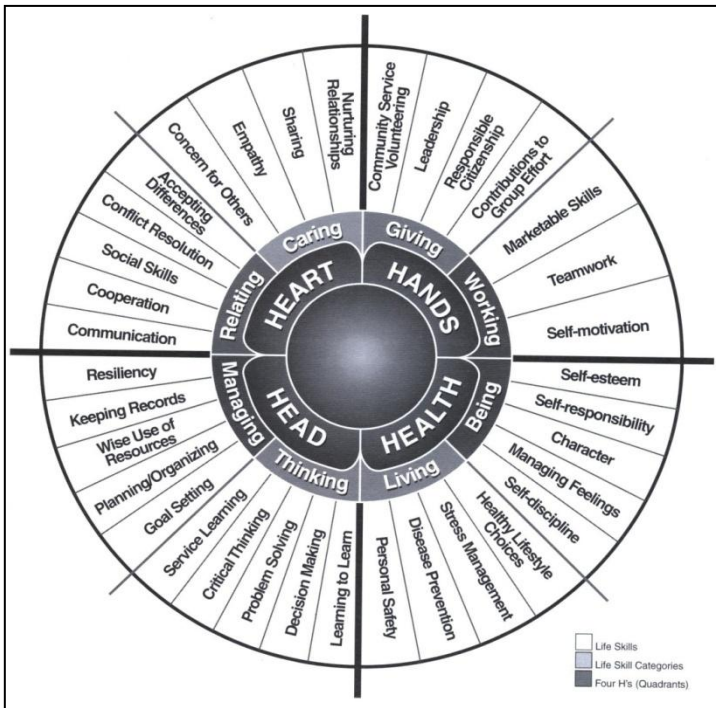
It is essential that all undergraduate students acquire the ability to express ideas concisely and clearly, an awareness of discourse styles specific to their discipline or professional area, skills in verbal reasoning, listening comprehension skills that equip them to deal with varied situations, from note-taking in lectures to work placement situations.

### **Life Skill Model for Personal Development**

The "Targeting Life Skills" model was developed by Pat Hendricks at Iowa State University and it illustrates in the following figure. This model is focused on four main areas which are denoted by 4-H and four quarters are head, hands, health and heart (Figure 1).

In this model, there are a total of 35 life skills that youth can learn and develop throughout his lifetime. These sub skills are organized around the four "H" quadrants of Head, Heart, Hands, and Health.

The "*Head*" quadrant includes the categories of Managing and Thinking. Under the Managing and Thinking level undergraduate need to gain skills on keeping accurate records, planning and organizing their club activities, setting personal and group goals, learning to serve others, and making decisions.



**Figure 1: The Targeting Life Skills Model**

*Source: Targeting Life Skills model by Hendricks, P. 1998.*

In the “*Heart*” quadrant, Relating and Caring categories are the two sub skills. Learn to build relationships, show concerns for others, resolve conflicts, cooperate, and communicate are the skills one can achieve under this level.

In the “*Hands*” quadrant, it is focus on the categories of Giving and Working. Skills learn here include leadership, citizenship, teamwork, and self-

motivation. All of these skills will help the graduates be more marketable once they reach the workforce.

Finally, the “*Health*” quadrant includes the categories of Living and Being. Here, learn to make healthy lifestyle choices, manage their stress more effectively, build character and self-esteem, and take steps to ensure their personal safety (Hendricks, P. 1998)<sup>13</sup>.

### **Blending Life Skills for Shaping Profile of Undergraduates**

Assimilating life skills such as critical thinking skills, decision making skills, interpersonal communication skills, and self-management skills is today’s requirement to produce well qualified graduates to win the job market. Universities are more responsible socializing agents which have more potential to enrich students with essential life skills needed to direct their young life towards path of success.

Graduate profile define the what sort of skills should be possessed by its graduates after the graduation. Life skills are essential as supplementary skills to acquire most of the higher order skills that defined by the graduate profile. Therefore, university education system should blend with life skill programs in order to produce high quality graduates as they imagine from the graduate profiles.

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<sup>13</sup> Hendricks, P. (1998). Developing Youth Curriculum Using the Targeting Life Skills Model: Incorporating Developmentally Appropriate Learning Opportunities to Assess Impact of Life Skill Development. Iowa State University.

As stated by Kaur (2006)<sup>14</sup>, in a global economy, higher education sustainability in educational terms relies on the development of both knowledge and skills among university graduates. This is because the mere possession of knowledge of the academic subject matter is no longer sufficient to sustain the students' future in the twenty first century.

Undergraduates are at the later stages of the adolescent age with biologically developed brain and well equipped with the theory and knowledge appropriately according to their disciplines. So they are ready to expose their gaining throughout the educated life as professionals in any field that they represented.

Absolutely, this is the real challenge for the graduates how perform excellently by integrating all skills that he or she developed from the childhood without any failure. Therefore, life skills such as communication, decision making, thinking, managing emotions, assertiveness, self-esteem building, resisting peer pressure and relationship skills are the important abilities for individuals to lead effectively with the demands and challenges of everyday life in the profession that they held.

But unfortunately our undergraduate courses are only knowledge based with lack in any scope for development of life skills. Therefore, university system in Sri Lanka hardly contributes for the skill

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<sup>14</sup> Kaur, N. and Sharma, R. (2006). Skills Development Among Undergraduates at a Malaysian University.



development of undergraduates which essential to be an effective leader in any working environment.

According to Gay (2004)<sup>15</sup>, employer specific subject modules will be helped to the students to develop their subject specific knowledge along with their generic skills and personal attributes depending on the context that they engaged. Martin (1999) was examined that student satisfaction depend on both academic and workplace supervisor in most of the work based graduate programs.

According to Weisen (1993), several life skills delivery mechanisms currently are being used in South Asia. They are stand-alone life skills curriculum, integrated curriculum with life skills, extracurricular activities and blended programming. While according to the literature, life skills should be integrated into all curricula, and not delivered as its own subject or module. As stated by the Regional Overview that prepared for the South Asia Life Skills-Based Education Forum (2005)<sup>16</sup>, the correct time has come to study how to integrate life skills across the entire secondary curriculum and tertiary curriculum, especially in the Universities.

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<sup>15</sup> Gay, C., Merrelyn, B., Bell, B., Vanda, C. and Carol-Joy, P. (2004). Developing Generic Skills at University During Work Placement and in Employment: Graduates' Perceptions. *Journal of Higher Education Research and Development*, pp. 147-165.

<sup>16</sup> Life Skills-Based Education in South Asia (2005). A Regional Overview prepared for the South Asia Life Skills-Based Education Forum.

Life skills integrated undergraduate courses should facilitate to develop abilities for adaptive and positive behaviors of the undergraduates to deal effectively with the demands and challenges of everyday life. In particular, any of subject discipline need to promote students' psychosocial competencies and interpersonal skills that help them to make informed decisions, solves problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and cope with and manage their lives in a healthy and productive manner.

According to the conclusions from a United Nations Inter-Agency Meeting in April 1998, the life skills programme is a structured way of delivering some important aspects of key working. It provides an opportunity for young people to develop skills in key areas that will increase their confidence, skills and the ability to sustain their own tenancy.

There are numerous ways to develop life skills in undergraduates such as class discussions, brainstorming, demonstration and guided practice, role plays, audio and visual activities (e.g., arts, music, theatre, dancing), small groups, educational games and simulations, case studies, debates and decision mapping or problem trees.

With the objective of personality development of youth through community services, undergraduate students can be involved in various activities like social awareness on current issues such as environmental awareness, health issues, woman & child welfare, awakening villagers etc.

Differently, special camps like national integration camp, adventure camps, and mega summer camps also possible to organize for the personality development of students. Industrial training is another opportunity for students to enhance their communication skills and inter personal relationships. However, some students may need help in developing the skills required before they work in a permanent work place.

According to Brown (1989)<sup>17</sup>, apply life skills which already gained from the graduate programs and analyze their prior experiences in the workplace will be more success under the supervision of both academic and work place supervisors. Such a model supports the principles of lifelong learning, situated learning, or learning in context and transformative learning.

Learning style asserts that students become successful academically in learning environments that match their own learning style (Kolb, 1984)<sup>18</sup>. Although Friedel (2006) argued that, students have their own learning style or preference, all learners have the ability to learn in settings that conflict with their preferred learning style.

As stated by Yousefzadeh (2011)<sup>19</sup>, life skills based education need to more focus on experiential,

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<sup>17</sup> Brown, J. S., Collins, A. and Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18: 32-42.

<sup>18</sup> "Kolb's Learning Cycle", <http://successcenter.truman.edu> (Assessed on 20<sup>th</sup> January 2013).

<sup>19</sup> Yousefzadeh, M., Naderi, E., Shariatmadari, A. and Seifnaraghi, M. (2011). Curriculum Design of Life Skills for Undergraduate

participatory and activity based methods to motivate students in their learning process.

Further, he explained that, the designing of life skill based curriculum for the undergraduate courses should be included six elements. Such as cognition purposes, emotional purposes, horizontal organization, vertical organization, teaching methods and evaluating objectives.

As a final goal of the Life Skill Based Education, students will be able to function in the workplace as confident communicators, good as team players, critical thinkers, problem solvers and, in addition, to be adaptive, adaptable and transformative people capable of initiating as well as responding to change (Harvey, 1997)<sup>20</sup>.

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Courses from the Viewpoint of Curriculum Planning Experts.  
*World Applied Sciences Journal*. pp.973-978.

<sup>20</sup> Harvey, L., Moon, S., Geall, V. and Bower, R. (1997). Graduates' Work: Organization Change and Students' Attributes. Birmingham, Centre for Research into Quality (CRQ) and Association of Graduate Recruiters (AGR).

# Personality Development to Increase Employability of Sri Lankan Graduates

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## Role of Education in a Nation

Education is one of the key determinants of measuring the development of a country as well as it's determined the wealth and prosperity of a nation. The connection between higher education and the economy is longstanding. University education can consider as core of higher education and it has objectives of providing facilities for higher intellectual needs of a country in both academic knowledge and professional training.

## Higher Education in Universities

Duties of universities have defined in several ways. Ballentine (1997)<sup>21</sup> as in Ariyawansa (2008)<sup>22</sup> defines universities as communities with overall academic

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<sup>21</sup> Ballantine J. (1997), *The Sociology of Education: A Systematic Analysis*, 4<sup>th</sup> Edition, Prentice Hall Inc., USA.

<sup>22</sup> Ariyawansa, R. G. (2008), Employability of Graduates of Sri Lankan Universities, *Sri Lankan Journal of Human Resource Management*, 2(1).

programs, centralized physical settings, a form of governance and a range of services.

Ariyawansa (2008) identifies multiple duties of universities which help to reach the above objectives such as “conduct pure and applied research and protect the knowledge”, “exchange the knowledge”, “train the students for the academic and professional sectors”, “protect the culture”, “solve the social problems as a public service”, “help for the modernization”, “improve students’ thinking skills, physical strength, control emotional feelings, obey the requirements, and enhance the brainpower”, “improve students requirements such as food, accommodation, medical facilities, guidance and finally the job opportunities”.

### **Role of Sri Lankan Universities**

At the beginning according to the state council of Sri Lanka in 1942, Sri Lankan university education is objected “to give a higher education and expand the knowledge and intelligence”. Universities Act No.26 in 1978 of Sri Lanka indicates that “university is established for the purpose of providing, promoting and developing higher education”.

According to the University Grant Commission (1984-1998), any definition with regard to the objectives of university education would not be accepted in global level. Accordingly Sri Lankan university education aims to explore the authenticity of graduates. According to the Economic Review (1997), at the end of university education, students should be “productive persons” which benefit themselves, the workforce, the community and the economy.

## Definitions for Employability

Employability can be defined in several ways. Alexander (2011)<sup>23</sup> defines that employability consists of achievements, skills, understandings and personal attributes that make graduate more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.

According to Yorke and Knight (2004), it is a graduate getting a job, possession of key skills like self-management, team-working, problem-solving, communication and literacy or a mix of cognitive and non-cognitive achievements and representations. Employment and employability is not the same thing. Graduate having a job can define as employed. Employable means having the qualities needed to maintain employment and progress in the workplace.

## Employability of Graduates of Sri Lankan Universities

University Grant Commission and Department of Manpower and Employment conducted surveys to find out unemployment rate of Sri Lankan graduates.

One survey has conducted on “*Career Outcomes Survey for Sri Lankan University Graduates* (2010)” by Department of Manpower and Employment using 2112 graduates to find out determinants of the employability using logistic regression model. The objectives of this

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<sup>23</sup> Alexander, M. (2011). Analyzing an Evolving Knowledge Society and Its Implication to Employability, Grin Verlag.

survey were to assess the changes in career outcomes of graduates over a given period of time, examine the specific relationships between graduates' career outcomes and factors such as gender, earnings, degree classification and faculties, identify the mismatch between skills possess by graduates and labor market demand and analyze job related attitudes of the graduates.

The academic performance, personal traits, parental facts, employment history and job seeking behavior of the graduates are the main determinants considered for that survey with sub categories. It has concluded that the career outcomes of the graduates taken for this study have been critically affected by several academic as well as personal, professional and parental factors in addition to their own job searching behavior.

The Presidential Committee was appointed in 1995 under the Ministry of Education to identify the problems related to graduate employability. The committee has revealed three main reasons for unemployment among graduates such as: (1) “negative attitudes”, (2) “lack of communication skills”, and (3) “lack of English knowledge”. Therefore, it is essential to increase graduate skills according to the requirement of the current work force.

### **Employers' Expectations on Employees**

In psychology, personality is considered a collection of emotion, thoughts and behavioral patterns. Heredity and environmental factors are shaping the personality of a person. Development of the organized pattern of



behaviors and attitudes can consider as personality development (John, 2006)<sup>24</sup>.

The most common skills come under personality and those needed in a working environment are time management, self-understanding, learning skills, teamwork skills, leadership skills, problem solving, decision making, working with diversity, career planning and risk assessment management.

In addition to those, several other skills are important, including: subject knowledge, research and analytical ability, inter personal relations, problem solving, self-confidence, self-management, decision making and judgment skills etc., genuineness, obedience, credibility, sensitiveness, cooperation, humbleness, devotion, active, unchangeable, altruistic, straightness, tactfulness, new thinking, leadership, strength, organizational skills, time management, skills of discussion, commercial knowledge and personality are virtues and skills that are expected from graduates.

Additionally, English proficiency and IT skills have been identified as critical determinants of graduates' employability in Sri Lankan organizations. Hettige (2000)<sup>25</sup> points out some attributes, such as ability to achieve results in a short period, wide interest, personal grooming, team leading, ability to prioritize, organize the time productively, general knowledge including

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<sup>24</sup> John A.(2006), *Personality Development*, Lotus Press, India.

<sup>25</sup> Hettige, S. T. (2000), *Students' Counselling and Welfare Service in the University System of Sri Lanka in Talent Development and Utilization*, University of Kelaniya, Colombo.

world affairs, openness, positive thinking, practical mind set, willing to learn from a cross section of people, and business etiquette are also determinants of employability of graduates.

### **Academic Approaches to Personality Development**

Graduates' knowledge and skills expected by the employers cannot be developed by conventional teaching, learning and evaluation methods. When consider the international perspectives on employability, some top level universities finalized the graduate skills and attributes to increase the employability and be successful in their chosen occupations (Table 1).

**Table 1: Graduate Skills and Attributes Expected by the University of Sydney**

<b>Skills</b>	<b>Graduates should</b>
Knowledge skills	<ul style="list-style-type: none"> <li>a. Have a body of knowledge in the field(s) of studied.</li> <li>b. Be able to apply theory to practice in familiar and unfamiliar situations.</li> <li>c. Be able to identify access, organize, and communicate knowledge in both written and oral English.</li> <li>d. Have an appreciation of the requirements and characteristics of scholarship and research.</li> <li>e. Have the ability to use appropriate technologies in furthering all of the above.</li> </ul>
Thinking skills	<ul style="list-style-type: none"> <li>a. Be able to exercise critical judgment.</li> <li>b. Be capable of rigorous and independent thinking.</li> </ul>

	<ul style="list-style-type: none"> <li>c. Be able to account for their decisions.</li> <li>d. Be realistic self-evaluators.</li> <li>e. Adopt a problem solving approach.</li> <li>f. (f) Be creative and imaginative thinkers.</li> </ul>
Personal skills	<ul style="list-style-type: none"> <li>a. The capacity for a commitment to life-long learning.</li> <li>b. The ability to plan and achieve goals in both personal and the professional spheres.</li> <li>c. The ability to work with others.</li> </ul>
Personal attributes	<ul style="list-style-type: none"> <li>a. Strive for tolerance and integrity.</li> <li>b. Acknowledge their personal responsibility for their own value judgments; and their ethical behavior towards others</li> </ul>
Practical skills	<ul style="list-style-type: none"> <li>a. Be able to use information technology for professional and personal development; and, where appropriate, be able to do following: Collect, correlate, display, analyze, and report observations, and apply experimentally-obtained results to new situations</li> </ul>

*Source: Generic Attributes of Graduates of the University of Sydney (1997)*

Educational systems of Sri Lankan universities have to be re-oriented to meet the challenges of future economic development. Upgrading the standards of the Sri Lankan degree programs based on the comments of Quality Assurance Council can consider as initial approach to increase the employability of graduates.

Curriculum design, content and review, teaching, learning and assessment methods, quality of students including students' performance and progression, skills development are some key aspect they consider in upgrading

Unemployment among university graduates reflecting a gap between education systems and the labor market conditions. It is clearly revealed employers expect certain qualities and characteristics from graduates. To fulfill this requirement approaches based on curriculum, extra- curriculum or a combination of both can be used as tools.

According to Maher and Graves, (2007) personal development planning can offer across and within the programs where a set of transferable skills or competencies are integrated through the whole curriculum. Transferable skills can develop through core curriculum involved identification of a finite number of modules.

Personal skills development and career planning can increase through specific employability related modules in curriculum. Work-based or work-related learning with or parallel with the curriculum is also a strategy can be used to increase the employability through the experience. In most survey results revealed that, employed graduates have the suggestion to give in-plant training for undergraduates as they can develop communication skills, learning, motivation, creative thinking and understanding skills.

University can arrange training program for undergraduates to develop the entrepreneurial ability.

Through this they can build confidence and develop skills of enterprising graduates and finally encourage the graduates into self-employment and make them to start their own business. This must be a structured period of employment for undergraduates.

Lecture series based on business can incorporate in the curriculum. Universities can arrange some brainstorming sessions for final year students inviting company managers and graduated students to present their profile and show how graduates can successful in their carrier.

Leadership and professional development program includes leadership knowledge and skills, communication, negotiation, team processes, problem solving, decision making, conflict resolution and career development can design for undergraduates.

# Effective Teaching and Learning Through Latest Mobile Devices

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## Introduction

Mobile technology has come up as a popular means of adult education in recent time. The mobile devices, which have been used for a long time for sending and receiving calls, writing messages, listening to music, playing games, recording and watching video, taking photos and browsing internet, are now being employed as learning tools for adults and young children alike.

In traditional teaching, the teacher and the learner are both physically present in a class room and the former presents the teaching materials to the latter. Now, the use of mobile devices for adults teaching and learning has become a new trend. It is a fast moving method of information transfer in education. The theories of activity-based learning, problem-based learning, work-based learning, and opinion-based learning, learner-centered learning, and so forth, can be integrated with these mobile devices.

Students and teachers communicate effectively and efficiently with these by simple clicks to obtain the

formative/informative and summative information and feedbacks. The learning outcomes for both ability and knowledge can be smartly measured and observed through the latest mobile devices and technologies (Lu, 2012)<sup>26</sup>.

Today, we are using our mobile phones, iPods, iPhones, iPod touch, Blackberries, PDAs, voice recorders and MP3 players in more ways ever before. These portable, digital devices, which are once primarily reserved for listening music, taking photos, and sending and receiving quick instant messages, have evolved into support tools that are now considered beneficial for the adult teaching and learning experience.

A great number of online colleges and universities are now encouraging adult learners to utilize their mobile devices as valuable education tools, and in turn they are setting up online lectures via audio podcasts, video podcasts and audio books. College instructors are also encouraging students to use mobile devices for research or to browse the internet for online academic resources (Porter, 2011)<sup>27</sup>.

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<sup>26</sup> Lu, Z. (2012) Learning with Mobile Technologies, Handheld Devices, and Smart Phones: Innovative Methods. Amaxon Publishers ISBN-10: 1466609362 ISBN-13: 978-1466609365, 1-272.

<sup>27</sup> Porter, C. (2011). How Can Mobile Technology Supporting Adult Education?.  
<http://www.learning3pointzero.com/2011/10/18/mobile-technology-support-adult-learning> (Accessed 30 January 2013).

The future trend in mobile learning has opened new doors for adult learners. Once confined to a college program due to location, class hours, or availability of courses, mobile devices have extended learning beyond school, college and class room hours. Learning through mobile devices develops enthusiasm and additional interest therefore extends the hours that can be engaged in learning.

Learners can earn a degree or any other valid certificate online, from the comfort of their own homes, hostel or from working place while maintaining fulltime employment and family care responsibilities. In addition, mobile devices are effective for the arrangement of practical sessions and field visits. Mobile devices could also be used for student evaluation process as well. In 2008, the Rudd Labor Government invested \$1 billion for a period of four years to turn every secondary school in Australia into a digital school.

According to this program, all students from grade 9 to 12 will be getting a computer for learning activities (Ferry, 2009)<sup>28</sup>. Individual, or group discussion using live web camera can be done effectively. Live viva can be conducted for student evaluation using free web-based facilities. Presently, students and adult learners are expecting to gather more information within a shortest possible time and latest mobile devices are useful for effective teaching.

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<sup>28</sup> Ferry, B. (2009) Using Mobile Phones to Enhance Teacher Learning in Environmental Education. Faculty of Education, University of Wollongong Research Online, 45-55.



## **Why Have Mobile Devices Become Popular?**

The use of mobile technologies in education increases the learner's engagement and prepares them for the labor sector. This trend evolved due to the fact that adult learners returning to studies are already dependent on these devices on a large scale. Instead of working against this natural dependence, educational institutions are combining mobile learning into online college and adult education courses and professional training programs. Teachers and learners in the current society are addicted to current mobile technologies.

The mobile computer is the most widely used device for teaching and learning. This is used to search for latest information over the internet instantly. Information processing, analysis, arrangement and storage can be done for future use. Information can be categorized into different subjects or sections and stored in such a manner for later access.

If the information is categorized and stored properly, they can be searched immediately for effective time management. Information processing, rearrangement, analysis can be done in an attractive manner using mobile computers by using various installed software. Teaching presentations prepared using computers are considered striking, informative and this enhances curiosity and motivation of the students.

Recently developed mobile devices such as touch phones, iPad and similar devices are also very useful in storing data and information for instant retrieval.

Teaching materials can be prepared, organized and used for presentation whenever necessary. These devices have simple operations, and quick response and thus less time-consuming. Digital books or e-books can be easily stored and referred to instantly. Teacher's note can be stored in such devices and used together with a mobile computer.

Mobile phones, audio video recording mobile devices are also used in communication, sound and video recording for educational purposes.

### **How Mobile Devices Supporting Adult Education?**

Mobile computers, iPad, iPods, MP3 players and other mobile devices are providing learners and teachers with convenient access to online tools designed to support adult education in the following ways:

#### ***Mobile Devices Cut the Cost of Education***

An investment in mobile devices offers the ability to reduce college expenses in some ways. Cost of purchasing text books is lessened as they can be easily downloaded and stored for easy reference. It is also possible to purchase only necessary book chapters for more savings. A variety of research reports, papers and publications can be downloaded free or at much lower price and then stored in mobile devices for direct access.

Hence, additional printing cost is not necessary. Downloading of materials can even be made with colleagues at shared cost. Teaching materials and course content uploaded by teachers to the LMS can be

downloaded by students to their mobile device and used anytime. LMS are very powerful and increasingly complex systems that bring learners and teachers together (Heinrich, *et al.*, 2012)<sup>29</sup>. They also can be accessed outside the university when time permits at minimal cost.

Downloadable study materials make learning resources available for anyone – Study notes and audio books can now be downloaded right into any mobile device and translated into various foreign languages. Furthermore, study notes and audio books can be provided for almost any course or subject including education, humanities and many more. Audio and video recordings of various scientific workshops, seminars and conferences are also downloadable.

### ***Audio Video Lectures and Podcasts are Available Anytime***

College instructors and professors now have the option of recovering a class lecture anytime and posting it for future downloading to any iPod, MP3 player or any other handheld device.

This way, for persons with a full time day job, they can simply log on and listen at any convenient time. Audio video lectures and other teaching materials can be stored in mobile devices and accessed instantly.

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<sup>29</sup> Heinrich, E. and Milne, J. (2012). Pathways for Improving Support for the Electronic Management and Marking of Assignments. *Australasian Journal of Educational Technology*, 28(2): 279-294.

## ***Enhancing Teacher-Learner Communication***

Mobile technology has enhanced teacher-learner communication remarkably by allowing personalized instruction to an individual student. Online talks or instant messaging has made it possible to answer any query regarding any paper or test. Above all, mobile learning greatly improves teamwork. It elevates the problem solving skills and critical thinking of the learners. The students learn to share and contribute to groups.

According to Ekanayake, (2009)<sup>30</sup> phones are the best mobile tools for school children but it is banned for these groups in Sri Lanka. However, there is no barrier for adult learners. Mobile phones has the highest battery life (10 hrs) compared to other mobile devices used for communication and academic purposes (Georgiev *et al.*, 2004).

Mobile devices which can be used in effective teaching and learning - There are many mobile devices, which can be used for both communication and studies. Audio, video and handhelds have recently become popular. Touch operated audio video equipments are easy to use. Vinci et al., (2013) indicated that short courses are considered suitable for this kind of mobile devised-based learning. The use of quizzes, glossaries, the interaction with tutor and other peers, may satisfy a wide range of needs and aims on behalf of students.

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<sup>30</sup> Ekanayake, T. M. S. Y. (2009). Mobile Phones for Teaching and Learning.  
[http://www.schoolnet.lk/research/mobile\\_phones\\_for\\_teaching\\_learning\\_science](http://www.schoolnet.lk/research/mobile_phones_for_teaching_learning_science)  
(Accessed on 12<sup>th</sup> January 2013).

Some examples of available mobile devices

Note book computers/ mobile laptops	PDA/palmtop
Electronic diaries	Mobile PDF readers
Electronic dictionaries	Mobile tabs
iPad/iPad mini	Mobile phones
iPod	USB storage devices
iPhone	Video cameras and camcorders
Smart phone	GPS units
Kindle	Bluetooth Communication devices

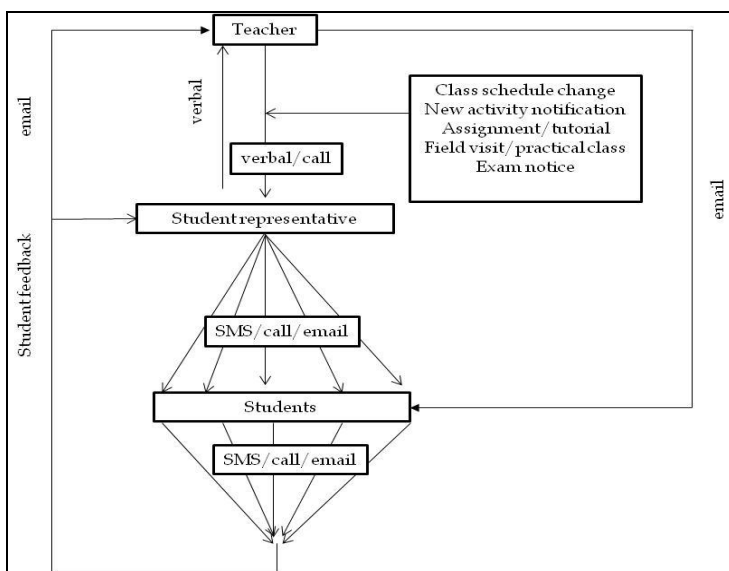
Most of the above devices are individually or collectively useful. A majority is equipped with one or more communication facilities listed below for effective communication and data transferring during studies:

GSM – Global System for Mobile Communications  
WAP – Wireless Application Protocol  
GPRS – General Packet Radio Service  
Bluetooth  
WLANs – Wireless Local Area Network  
IrDA – Infrared Data Association  
GPS – Global Positioning System

### **Teacher – Learner Communication Pathway**

Fast and effective communication between teacher and students are essential. Communication has become

very convenient as almost everyone now has some sort of a mobile device. Hence, message transfer became easier and faster. A teacher can directly and instantly contact both individual as well as a group of students through a representative via email, call or SMS. Similarly students can give a feedback instantly (Figure 1).



**Figure 1: Effective Communication Pathway Between Teacher and Students Using Mobile Devices**

Mobile devices can be effectively used for sending notifications to students on schedule change, classroom change, lecture/practical or field visit change and also for exam notice. In this regard, some students may sometimes miss common announcements at certain situations and thus could fall into trouble.

Communication based on mobile devices is effective as the individual student get the message of notice independently. “Any Final Year students who are to be offered a Viva will be notified by telephone or e-mail on the morning of Wednesday 20 June 2012”.

The online Undergraduate Hand Book of Manchester University, (2012)<sup>31</sup> has given the above instructions regarding exam notice. The student has to use mobile devices to view emails or to get telephone calls regarding the exam notice. Figure 1 describes how the current mobile devices have influenced the teacher – student communication pathway.

### **Student Cunselling and Problem Solving Using Mobile Devices**

The working environment should be friendly for effective teaching and learning. Students may not show better performance when they are under stress or having some problems. For better perception and understanding of lessons, students’ mind should be clear of worries before and during classes.

Various stresses could come from problems within him or from other students, friends, relatives and teachers. However, the teacher can communicate with such needy students more, especially after class hours, using mobile devices thru voice call, email, online chat and SMS, etc. Proctors, mentors and student councilors

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<sup>31</sup> Online Undergraduate Hand Book, (2012) Manchester University  
<https://ughandbook.portals.mbs.ac.uk/Myassessment/Vivaexams.aspx>  
(Accessed on 12<sup>th</sup> January 2013).

can also immediately contact individual students for important advices.

It is also possible for students to contact their supervisors, advisors and mentors to discuss their problems even if they are out of the office or abroad. Moreover, using mobile devices, students get a chance to discuss with other students, union leaders and cooperate with others with regards to problem solving (Lan, 2010)<sup>32</sup>.

### **Use of Mobile Devices for Submission of Assignments and Student Reports**

The majority of undergraduate students in Sri Lankan universities submit assignments and reports in the form of hard copies. However, physical submission of hard copies takes time and resources. Alternatively, student can prepare assignment and other reports electronically and digital files can be submitted using mobile devices on or before the deadline. Teachers can do marking and send feedback to each student.

This is now easily adopted by the Learning Management System (LMS), which is already launched in Sri Lankan universities. Students' grades for assignment and reports could be recorded in mobile devices, which can be retrieved whenever necessary. Grades can also be simultaneously recorded in notebooks for safety.

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<sup>32</sup> Lan, Y. J., Sung, Y. T., Tan, N. C., Lin, C. P. and Chang, K. E. (2010). Mobile Device Supported Problem Based Computational Estimation Instruction for Elementary School Students. *Educational Technology & Society*, 1(3): 55-69.



Mobile devices are useful in e-learning and students' assignment marking tasks (Heinrich *et al.*, 2012). They have also suggested that the assignment submission should be incorporated into the LMS. In a previous research, authors have studied the marking of assignments that are submitted electronically.

Electronic support for the submission, management and marking of these student reports provides administrative benefits, time and resource savings, and the removal of geographical limitations (Milne *et al.*, 2007).

### **Use of Mobile Devices by University Students**

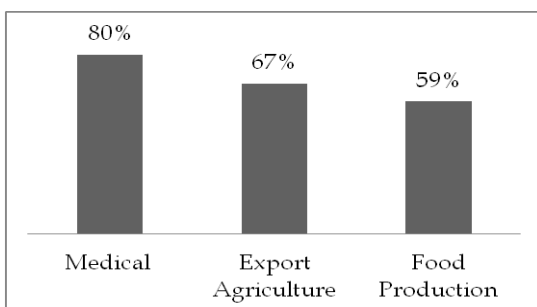
Various mobile devices are used by university students in Sri Lanka for daily educational activities. In order to develop the skills and knowledge, it is necessary to integrate mobile learning strategies into educational programs (Ferry, 2009).

A survey was conducted in three universities in Sri Lanka to evaluate the use of mobile devices for the teaching and learning process. Fourth year medical students of the University of Peradeniya as well as third year export agriculture and food production degree students of Uva-Wellassa University and Wayamba University of Sri Lanka, respectively, participated voluntarily in the survey. A total of fifty two students were evaluated.

The results show that mobile phones are used by all the university students interviewed. Among those who used this tool, 98% said that these are very helpful for

their studies. The device is convenient for effective communication with friends, family members, academic and non-academic staffs. The students also use it for a wide range of school-related activities including data recording and transfer, internet browsing, photos and video taking, voice recording, calendar, clock, alarm, calculator and dictionary.

Figure 2 shows mobile phone is widely employed by students for internet browsing. Around 80% of medical students and 67% and 59% of export agriculture and food production degree students, respectively, use it for this purpose. This results to an average of 70%.



**Figure 2: Use of Mobile Phone by University Students**

Higher use of mobile phones by medical students may be reflective of their higher financial status. To be accepted in a public medical faculty in Sri Lanka, very high scores during entrance test are required. This could be made possible thru the high level of primary and secondary education, which is readily provided by families of sufficient financial capability.

Furthermore, the medical course is generally longer than other degrees, thus again requiring for such good economic background. It is understandable that this group of students may have easy access to mobile phones.

For comparison, a previous study reported that 91% of internet usage by young children in America is for education. This has greatly increased from 39% and 66% from 2004 and 2009, respectively (Commonwealth of Australia, 2010)<sup>33</sup>. (Again, the exceptionally high level of usage in American schools may indicate their better economic status).

This increasing trend is in support of both the teaching and learning process. Hence, recent mobile phones have been equipped with many attachments and software, which are useful for such applications.

### **Use of Mobile Device to Communicate with Academic Staff**

Mobile devices are very effective communication tools in recent times. However, result showed that an average of only around 26% university students used mobile phones to communicate with professors and each other.

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<sup>33</sup> Commonwealth of Australia, (2010). Trends in Media Use by Children and Young People. Published by the Australian Communications and Media Authority. P.O box 13112, Law Courts, Melbourne, Vic 8010, Australia 1-39.

A study conducted in Nigeria also revealed a much lower value of around 6% (Adomi, 2006)<sup>34</sup> relative to the situation in Sri Lanka. Such low percentage may be due to the existing professional gap between students and academic staffs. The individual data is 13% for medical students and 18% for food production students. It was interesting to note that export agriculture students have a high usage of mobile phones for this purpose (47%).

To explain this finding, the students of Uva-Wellassa University mentioned that they do not have permanent teachers for most of their subjects. Instead, many staffs are visiting lecturers from various institutions who are willing enough to share their office phone or mobile number for regular communication.

Students casually exchange messages with these lecturers and they also consider them as possible contacts for future industrial training and job opportunities. Another reason they mentioned is the relatively smaller class size in their field so that teachers can manage to communicate with the individual students.

### **Use of Mobile Computers by University Students**

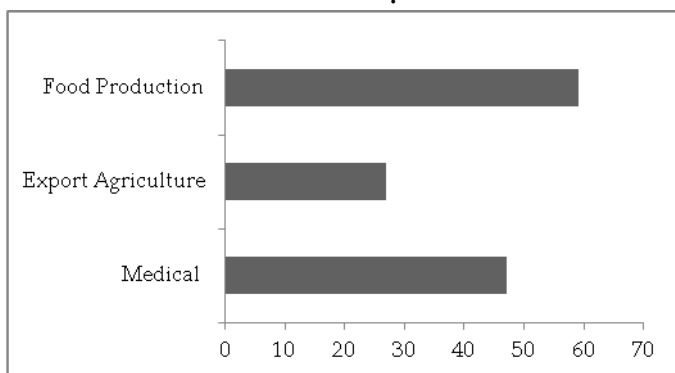
In addition to mobile phones, mobile computers such as laptop have also become popular tools for the academics. For teachers, they are very useful for the

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<sup>34</sup> Adomi, E.E., (2006). Mobile Phone Usage Patterns of Library and Information Science Students at Delta State University, Abraka, Nigeria. *Electronic Journal of Academic and Special Librarianship*, 7 (1): 1-13.

preparation of teaching materials, data analysis, presentations, audio video recording, etc. Students use them for information gathering, internet browsing and for the preparation of reports and assignments.

They are also very convenient for class presentations. Among those surveyed, around 60% of food production students are equipped with computers for their class activities (Figure 4). For medical students, this value is 50% while for students in export agriculture, a much lower usage of 30% was observed.



**Figure 4: Use of Mobile Computers by University Students**

According to the Commonwealth, the 2010 mobile computer usage by adult students has increased from 12% (2004) to 39% (2009) in USA indicating that a positive trend. Time spent on computers has also increased from 27 minutes per day to 1 hour and 29 minutes by American young children. A significant

amount of students' working time is indeed currently being allotted for computer use.

## **Audio Video Recording Using Mobile Devices**

Audio and videos are useful for classroom activities. Specifically, audio and video recording and play back significantly support the language and music education. In other fields, these are also practical tools for field visits and consequent information gathering. Recorded files can be replayed whenever necessary.

These can be made at any available time such as during relaxation and for long distance travel by bus, train, ship and airplanes. They can also be safely played in cars even when driving alone through long distances whenever Bluetooth connection or any other hand free system is available. Hence, efficient time management is possible through these devices.

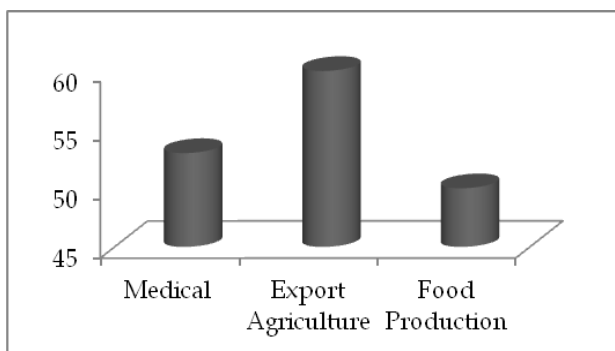
Teachers can enhance their lecture notes by adding voiceovers for added benefits to the students. Audio files can also be included with handouts and assignments and other documents for better understanding. It can enhance text resources, for example, providing comments or context to an academic paper. It can engage students' attention when studying on their own or when learning a difficult subject matter (JISC Digital Media, 2013)<sup>35</sup>.

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<sup>35</sup> JISC Digital Media., 2013. Recording Audio Voiceovers for Teaching and Learning Materials, <http://www.jiscdigitalmedia.ac.uk/audio/advice/recording-audio-voiceovers-for-teaching-and-learning-materials> (Accessed on 20<sup>th</sup> January 2013).

Teachers can also provide students with an audio feedback, which is in the form of spoken comments, instead of the traditional written notes. In return, audio feed back from students can also be collected by the teachers. In music education, drama and language education, teachers can immediately record student activities and show to them for faster evaluation and improvement (González, 2013)<sup>36</sup>.

In this regard, undergraduate students have been using their mobile phone as a substitute audio and video recorder. Some students use iPod and similar devices for this purpose. Figure 5 shows that more than 50% of medical students use mobile phones for practical sessions with patients.



**Figure 5: Use of Mobile Devices by University Students for Audio, Video Recording for Academic Purposes**

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<sup>36</sup> González., M. J. F. 2013. Advantages and Limits of Video-Recording as a Tool for Students, Teachers and Researchers in Music Conservatoires University of Latvia (Latvia) [http://www.pixelonline.net/edu\\_future/common/download/Paper\\_pdf/MUS07-Fernandez.pdf](http://www.pixelonline.net/edu_future/common/download/Paper_pdf/MUS07-Fernandez.pdf) (Accessed on 30<sup>th</sup> January 2013).

## Usefulness and Usage of Mobile Phones

Table 1 summarizes the extent of utilization of mobile devices by undergraduate students of Sri Lanka.

**Table.1: Use of Mobile Devices by University Students for Different Activities**

Student Group	Useful for UG Life ( <i>Very Useful, Useful</i> )	Use for Data Processing, Storage and Transfer	Use as Alarm, Clock, Calculator, Calendar and Dictionary	% Features Use
Medical	40 60	73	100	66
Export Agriculture	60 40	60	87	80
Food Production	18 82	50	100	72

According to the results, mobile devices are very useful (60%) for export agriculture students. Food production degree students are not much into this practice (18%). Majority of the students use mobile phone as the data storage and transferring device during their studies. Medical students came out on top in this aspect (73%). Almost all students use their mobile device as clock, alarm, calculator, calendar and dictionary. However, it appears that students are not fully utilizing all features available on their mobile devices. This may be due to lack of time, lack of other devices or they are not probably fully aware of the available features.



## **Limitations of Use of Mobile Devices for Education**

Even though mobile devices are useful and effective as teaching and learning tools, they also have some limitations. The high cost of these devices is the main obstacle particularly for developing countries. Most students may not afford to have these gadgets for their studies.

In general, adult students in Sri Lanka do not have a culture of doing part time jobs outside their study time. They solely rely on the limited finances of their parents for such additional accessories. This is in contrast to students in many developed countries, who are able to earn additional income from part time jobs and thus can afford these both for leisure and academic purposes.

Another limitation is cost of packages that go with the mobile devices. These include the additional charges for mobile call, data and internet. There are numerous good software for enhancing studies, but these are also expensive for the average student. Most of these mobile applications are also available only thru downloading, which requires the use of credit cards for payment.

Unfortunately, majority of students in Sri Lanka do not have this capability. Because of the limited income sources of students, the effective use of mobile devices is greatly restricted. Mobile phone and Wi-Fi signal distribution and strength throughout this country are also not sufficient enough in some cases to take advantage of these devices.

In addition, the so called student-teacher gap is also a factor that limits the utility of mobile devices in universities. Some teachers do not like the concept of exchanging messages (SMS or emails) with their students. However, it is hoped that through the constant and continued use of these devices, such gap may ultimately be lessened in the future so that the benefits of mobile phones for education may be fully appreciated.

# Information & Communication Technology for Language Learning

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## Introduction

Collins English Dictionary defines ‘learning’ as any relatively permanent change in behavior that occurs as a direct result of experience. According to this definition, behavior change in learning occurs when the learner experiences the world. In a similar way, Birkenholz (1999)<sup>37</sup> defines learning as: ‘acquiring new, or modifying existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information’.

This nature of learning applies to language learning as well because learning a language results in change in behavior and skills.

The basic role of teacher or teaching is to facilitate this process of learning. Those who had experienced the world through reading or experiment became teachers, who facilitate the process of language learning. When this teaching-learning process involves systematic

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<sup>37</sup> Birkenholz, R. J. (1999). *Adult Learning*. Danville, IL: Interstate Publishers, Inc.

instruction at a school or university, it is termed ‘education’.

Education, today, involves technology, and the term ‘educational technology’ is used to refer to this phenomenon, which is defined as: “the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources.” Richey (2008)<sup>38</sup>.

Creating, using and managing appropriate technological processes and resources are absolutely necessary in the teaching-learning process in order to cater to diverse learning styles of learners. In language teaching, technology is used primarily to facilitate the improvement of receptive skills, viz: listening and reading. From the past, recordings, audio players, and various visual aids have been used for facilitating the improvement of listening and reading skills.

With the emergence of the computer, and, then the World Wide Web, both the extent and scope of the use of technology in language teaching-learning have broadened greatly. This field of the use of computers and web for language learning is commonly referred to as Computer Assisted Language Learning (CALL).

Levy (1997)<sup>39</sup> defines CALL as “*the search for and the study of applications of the computer in language*

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<sup>38</sup> Richey, R. C. (2008). Reflections on the 2008 AECT Definitions of the Field. *TechTrends*. 52(1) 24-25.

<sup>39</sup> Levy, M. (1997). *CALL: Concept and Conceptualization*. Oxford: Oxford University Press.

*teaching and learning.*” These applications of the computer in language teaching and learning have been updating in parallel to the changes happening in theories of language teaching. The type of CALL applications used during the time when language learning was considered a behavior is referred to as ‘behavioristic CALL’ by Warschauer (1996)<sup>40</sup>.

In such CALL programs, a stimulus in the form of text was presented on screen to the learner, who, then, could respond by entering an answer using the keyboard. After 1970s, behaviorist theories of language learning were replaced by the communicative approach. Parallel to this change, CALL programs took the shape called ‘Communicative CALL’ (Warschauer, 1996), where they became more interactive, claiming to foster natural communication.

Following communicative approach, language learning has now taken the shape of an integrative, eclectic approach. Accordingly, CALL programs today are also termed ‘Integrative CALL’. The idea there is to integrate multimedia, world Wide Web (WWW) etc. into CALL applications.

### **Office Tools and Software for Language Learning**

One of the basic uses of computer for language learning comes with the mere use of office tools, which are available in any type of computer even without the need to have internet facilities. The most common office

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<sup>40</sup> Warschauer, M. (1996). Computer Assisted Language Learning: an Introduction. In: Fotos S. (Ed.) Multimedia Language Teaching, Tokyo: Logos International: 3-20.

tools that help in the language teaching-learning process are word processors and presentation programs.

Today, the very first computer application that any beginning user of a computer touches, the word processor, helps in numerous ways in the improvement of language, especially that of the English language. This mainly encompasses areas such as writing and vocabulary development.

Unlike when writing on a sheet of paper, writing on the word processor assists the learner in improving his/her spellings and even grammar. It is also possible to get the meanings of most of the unfamiliar words just by right-clicking, and checking for synonyms. It naturally helps the learner in improving his/her word power.

Additionally, the ‘Review’ functions of the word processor enable both the learner and the teacher to improve the process of writing by correcting and commenting, and later accepting the changes by the learner. According to Pennington (2004)<sup>41</sup>, writing on the computer screen has the following advantages as well:

- The physical ease of making key presses and typing text.

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<sup>41</sup> Pennington, M. C. (2004). Electronic Media in Second Language Writing: An Overview of Tools and Research Findings. In: S. Fotos and C.M. Browne (Eds.) *New Perspectives on CALL for Second Language Classrooms*. (pp 69-92). London: Lawrence Erlbaum Associates.

- The focusing of attention by the clear and restricted amount of text that is visible on the computer screen.
- The marking of the point where text is being produced by the blinking cursor, which also acts as a prompt to the writer to keep writing.
- The writer's awareness of the possibility of saving or changing text at any time."

Next to the word processor, presentation programs like the PowerPoint are also helpful for the language teacher and the learner to improve presentation skills, which is a very important skill in learning a language.

The ability of the presentation program to simply incorporate various media, such as visuals, audio, and video, provides the user with a stimulus which enables him/her to go on producing the target language without having to memorize things to talk. This, in turn, improves the fluency and confidence in the user in producing the target language.

The mostly commercialized application of the use of computers for language learning is the use of language learning software. There are numerous types of commercially available language learning software which are claimed to be suitable for self improvement. The idea there is either to complement the human teacher of language or to replace the teacher with the software.

Glendining (2007)<sup>42</sup> recommends the following checklist for evaluating language learning software:

- A. Program Description
  - What are the objectives of the program?
  - What tasks are students asked to perform?
- B. Learner Fit
  - Is the difficulty level right for my students?
  - Are the tasks appropriate for my students?
- C. Authenticity
  - To what extent do the activities correspond to real world language activities outside the classroom?
  - Can the activities be justified on other grounds?
- D. Pedagogic considerations
  - How interactive is the program?
  - What help is provided?
  - What feedback is provided?
  - Does it create conditions which may contribute to Second Language Acquisition (SLA)?
- E. Practicality and utility
  - Can this program be used in your teaching situation?
  - What are its advantages and disadvantages?

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<sup>42</sup> Glendining, E. H. (2007). CALL Program Evaluation: Handouts for CALL 2006/2007, Institute for Applied Language Studies, University of Edinburgh, UK.



- Is it likely to be more effective than a similar exercise done in other media (e.g. audio/video tape, paper)?

Using the above checklist, the teacher can select the best CALL program for his/her target group of learners. One of the very important aspects coming under the practicality and utility of CALL software is the financial cost associated. Because CALL software is intellectual property, the cost associated is very high. Therefore, for a middle income country like ours, it would be prudent to select software for which payment has to be made only once, rather than software of which license has to be renewed annually.

Another option is to use authoring software, such as 'Hot Potatoes', by teachers to create CALL activities for their learners. 'Hot Potatoes' software helps teachers to create multiple-choice, jumbled-sentence, gap-fill, matching/ordering, short answer, and crossword exercises for their learners. It is freeware, but activities created using it should be published in the World Wide Web.

### **Web Enhanced Language Learning (WELL)**

As the name implies, the basic objective of WELL is to enhance language learning skills through web resources. Use of any web resource helps in improving language skills of a language like English because many of the websites are presented in English language. Additionally, there is also a vast amount of websites which are specifically designed for the improvement of English and other languages.

Many of these websites can be accessed and used without paying any subscription, whereas for some of the websites for language learning, the learners have to subscribe to them. In order to evaluate language learning websites for choosing suitable websites for the learner, teachers can use a checklist such as the following suggested by Glendining (2007):

1. Accuracy  
Is the information correct?
2. Authority  
Is it clear who wrote the page?  
What are their credentials and affiliations?  
Is there an email address for contact?
3. Disclosure  
Who owns the site?  
Are there any sponsorship or advertising deals that could affect the selection of content?
4. Currency  
Is the information up-to-date and is there an indication of when the page or site was created and when it was last updated?
5. Presentation  
Are the pages attractively designed and easy to navigate?

In addition to the above checklist, it is also worth looking at the language skills improved in the website, type of audio/visual support provided, level of

language complexity, and the help and feedback provided.

Among the many a websites for language learning, reference sites are important for language learners as well as for general public equally. A very useful free site of this kind is ‘One Look Dictionary Search’, which searches the meanings, synonyms and usage examples of terms in around 60 online dictionaries under the categories: general, art, business, computing, medicine, miscellaneous, science, slang, sports, tech, and phrases.

The ‘general’ category of this site searches definitions in popular and reliable online dictionaries such as, Cambridge Advanced Learner’s Dictionary, Compact Oxford English Dictionary, Merriam-Webster’s Online Dictionary, McMillan Dictionary, Collins English Dictionary, and The Free Dictionary/Thesaurus by Farlex among others.

A special advantage of most of the online dictionaries and soft copies of dictionaries over the hard copies of dictionaries is the fact that the availability of sound files in the former provides the user with the ability to listen to the pronunciation of terms. Similarly to ‘One Look Dictionary Search’, ‘Encyclopedia.com’ searches information over 100 encyclopedias and dictionaries.

In addition to dictionaries for English definitions, ‘Madura Online Dictionary’ can be used for getting Sinhala translations of English terms. A similar venture is the English-Sinhala PopUp Dictionary, ‘EnSiTip’, which was created as a Firefox add-on, by the University of Colombo School of Computing (UCSC).

However, UCSC discontinued EnSiTip from mid 2010 because the dictionary associated with EnSiTip, which was compiled using public contributions, was not licensed.

A plethora of web resources are also available for improving listening, speaking, writing, and reading skills of learners, as well as for sharing teaching material and teaching experiences of teachers of language across the globe. Some examples of these and their uses are given in Table 01.

**Table 1: Examples of Web Resources for Language Learning**

Site	Comment
<b>For all Skills</b>	
<a href="http://www.uefap.com/links/linkfram.htm">www.uefap.com/links/linkfram.htm</a>	A database of websites for using English for Academic Purposes. [Reading/writing/listening /speaking/grammar/vocabulary/specific subjects]
<a href="http://www.camsoftpartners.co.uk:80/websites.htm">http://www.camsoftpartners.co.uk:80/websites.htm</a>	A to Z list of links to CALL sites.
<a href="http://www.criticalreading.com">http://www.criticalreading.com</a>	A site for reading and writing
<a href="http://www.lyrics.com">www.lyrics.com</a>	A collection of music lyrics.
<a href="http://www.bbc.co.uk/worldservice/learningenglish/language/">http://www.bbc.co.uk/worldservice/learningenglish/language/</a>	Provides useful and interesting material at sub-sections like vocabulary, listening etc.
<a href="http://vlc.polyu.edu.hk">http://vlc.polyu.edu.hk</a>	Useful for both teachers and learners.
<a href="http://www.englishpage.com">www.englishpage.com</a>	Provides tutorials and

	activities. Equally important for both teachers and learners.
<a href="http://www.eslbee.com/">http://www.eslbee.com/</a>	Advanced composition for non-native speakers of English.
<a href="http://owl.english.purdue.edu/">http://owl.english.purdue.edu/</a>	An online writing lab. Provides useful writing tips.

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### For Listening

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<a href="http://www.elllo.org/index.htm">http://www.elllo.org/index.htm</a>	A good collection of listening activities. Over 1000 activities.
<a href="http://www.esl-lab.com">http://www.esl-lab.com</a>	Good for listening practice.
<a href="http://www.eltpodcast.com">http://www.eltpodcast.com</a>	Useful listening materials.
<a href="http://cla.univ-fcomte.fr/">http://cla.univ-fcomte.fr/</a>	Useful videos, songs, audios, podcasts and all other aspects of EFL/ESL.
<a href="http://www.soundsofenglish.org/index.html">www.soundsofenglish.org/index.html</a>	Useful listening exercises.
<a href="http://www.voanews.com/">http://www.voanews.com/</a>	Provides a special English workbook.

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### Sites for Teachers

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<a href="http://www.teachingenglish.org.uk">http://www.teachingenglish.org.uk</a>	A useful website for teachers. Provides articles on methodology and developing skills etc.
<a href="http://www.english-forum.com">www.english-forum.com</a>	Links for both teachers and students.
<a href="http://esl.about.com/">http://esl.about.com/</a>	Good links for teachers. Activities too.
<a href="http://www.eslcafe.com/">http://www.eslcafe.com/</a>	For both teachers/students

<http://www.eslwonderland.com/> Resources for teachers and learners.

Journals	
<a href="http://www.ict4lt.org/en/index.htm">www.ict4lt.org/en/index.htm</a>	A useful CALL journal/online course for teachers.
<a href="http://iteslj.org/">http://iteslj.org/</a>	A useful online journal for teachers.
<a href="http://eltj.oupjournals.org">http://eltj.oupjournals.org</a>	Oxford ELT journal. Useful articles, text messages, reviews [including websites] etc.

Links checked: 13/02/2013

## Computer Mediated Communication (CMC)

The primary objective of language is communication. The term computer mediated communication (CMC) is used to refer to the use of computers (usually networked computers) for interpersonal communication. Common tools used in CMC are emailing, blogging, wikis, audio and video conferencing, online chat, multi-user object oriented domains (MOOs), and Virtual Learning Environments (VLEs). To refer to most of these tools, the term ‘Web 02 Technologies’ is also used.

One simple CMC device that language learners can be exposed to is emailing. Although emailing is categorized as an asynchronous (non-real time) communication medium, regular email users use it instantaneously making it almost real time when both the sender and the recipient are online.

Just as Gear (1999)<sup>43</sup> observes, unlike when writing for imagined situations in the classroom, when a learner is writing an email he or she knows that there is a real purpose in writing it, there is a real audience for receiving the message and responding to it, and the learner is a real communicator, who is a part of the communication process, that is producing the message.

Gear (1999) further observes the following advantages of e-mail projects, including: they (1) give learners opportunities to interact and negotiate meaning; (2) give learners authentic tasks to perform; (3) expose learners to varied and creative language and encourage learners to produce it; (4) give learners enough time and feedback; (5) guide learners to attend mindfully to the learning process; (6) help learners work in an atmosphere with an ideal level of stress and anxiety; (7) support learner autonomy.

Disseminating one's writing to a wider audience can be more effectively done using web-logs, called blogs. They are webpage journals with articles in reverse date order. They can be used as 'a space for individuals to write whatever they choose, with an option for readers to comment on what they have read' and can also be used in language classroom for developing interactive writing (Eastment, 2005<sup>44</sup>).

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<sup>43</sup> Gaer, S. (1999). Classroom Practice: An Introduction to E-mail and World Wide Web Projects. In: Egbert, J and Hanson-Smith, (Eds). CALL Environments: Research, Practice and Critical Issues, pp 65-78, Alexandria: TESOL.

<sup>44</sup> Eastment, D. (2005). Blogging, *ELT Journal*, 59(4): 358-261.

Using ‘Blogger.com’, the teacher can easily create a blog, and ask the learners to become members of the blog by inviting them using their email addresses. Thereafter, the teacher can invite the learners to express their thoughts by giving a prompt and asking the students to both express their views on the prompt and comment on each other’s views. To practice blogging in class, an individual networked computer for each and every student in class is not always compulsory.

Once guided, the learners can attend to their writings and comment on them at their leisure, at anytime from anywhere. In an extreme case, the present writer has the experience of teaching CALL to a group of learners who didn’t even have sufficient furniture in classrooms, let alone computers and internet. The courageous group of students managed with the two laptop computers and the internet dongle brought by the teacher and ultimately completed their first blogging project, ‘2012-HNDE-CALL-Anuradhapura’.

A further step ahead in blogs is wikis, which were originally known as ‘wikiwikiwebs’, meaning ‘quick webs’ in Hawaiian. Wikis are web-based spaces for collaborative authoring, which can be modified by any user.

The most common example is Wikipedia, which is an online encyclopedia, authored by people around the globe. Although creating individual wikis for classes is not as free as creating blogs, writing about a local topic, aiming at publishing in the Wikipedia is a possible activity for language learners.



Audio and video conferencing, web chat, and MOOs are real-time communication media that foster instant natural communication. Audio-video conferencing can be done using mobile phones, Skype or NetMeeting (Microsoft), which comes packaged with many personal computers. When both seeing (visual) and hearing (auditory) are there, meaning negotiation in communication becomes effective.

In web chat, neither video nor audio is used, but it is advantageous when communication involves speakers of various varieties of English because the problem of accent does not arise then. Chatting is now possible even with email hosts, Skype, and social networking sites such as Facebook. MOOs are virtual social environments where the users can chat with some virtual kinesthesia than chat rooms.

Another virtual learning environment, 'Second life', is a 3D virtual world that allows users to be imaginary avatars and communicate with other such characters. Learners can improve their language skills in these virtual environments while enjoying the gaming spirit in them.

MOODLE, Modular Object Oriented Dynamic Learning Environment, is a virtual learning environment, which can be used as a Course Management System (CMS), also known as Learning Management System (LMS). MOODLE is a global development project designed to support a social constructionist framework of education. It is provided freely as open source software.

## Corpora and Concordancing for Authentic Language Use

Francis (1992<sup>45</sup>) defines a corpus (plural ‘corpora’) as “a collection of texts assumed to be representative of a given language, dialect or other subset of a language, to be used for linguistic analysis” (quoting Francis, 1982).

The advantage of corpora over dictionaries is that corpora data are authentic, real language used by the users of the language or the subset of language, whereas dictionaries usually give made up examples. Additionally, unlike dictionaries, corpora can provide innumerable numbers of a term in its real contexts. Therefore, corpora are especially useful for language teachers and learners.

A growing number of computer-based corpora are presently available. The most common general corpora are 100 million word British National Corpus (BNC), and its American counterpart, American National Corpus (ANC), certain versions and samples of both of which can be obtained for free. Language variety based comparable corpora such as International Corpus of English (ICE) can also be obtained for linguistic research by contacting the relevant research teams.

South Asian Varieties of English (SAVE) corpora are a similar project dealing with newspaper English. Teachers and researchers can also compile corpora for

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<sup>45</sup> Francis, W.N. (1992). Language corpora B.C. In: Trends in Linguistics, (Ed. Jan Svartvic) pp 17-34, Walter De Gruyter & Co, Germany.

studying language of their teaching situations. Such corpora are usually referred to as ‘specialized’ or ‘dedicated’ corpora.

All these corpora will be of little use if they can’t be accessed electronically. The corpus access software, which can re-arrange language data in corpora so that patterns of language are made obvious, is called a concordancer. Among the various concordancers available, ‘AntConc’ is a freely downloadable concordancing program.

‘Compleat Lexical Tutor’ is a free online concordancing program which has many uses. ‘WebCorp’ is a free online concordancer, which accesses the web as a corpus. ‘WordSmith Tools’ is downloadable software for which subscription has to be paid.

### **Computer Aided Assessment (CAA).**

According to Atkinson & Davies (2005)<sup>46</sup>, Computer Aided Assessment (CAA) refers to any instance in which some aspect of computer technology is deployed as part of the assessment process. The following can be listed as principle examples of CAA in language learning:

- Interactive tests completed on a computer
- Use of computers to produce coursework

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<sup>46</sup>Atkinson, T, Davies, G. (2005). ICT4LT module—Computer Aided Assessment (CAA) and Language Learning. Available Online at: [http://www.ict4lt.org/en/en\\_mod4-1.htm](http://www.ict4lt.org/en/en_mod4-1.htm) (Accessed on 14<sup>th</sup> February 2013).

- On-screen marking of students' word-processed writing
- Using a spreadsheet or database to keep a record of students' marks
- Use of email to send coursework to students and (for students) to receive marks and feedback
- Use of web pages to set tasks for students and to provide tutor support.
- Use of plagiarism detection software.

Although most of the above examples can best be utilized in formative assessment, CAA is now applied in summative assessment as well. Internationally accredited English language tests such as 'International English Language Testing System' (IELTS), and 'Test of English as a Foreign Language' (TOEFL) use CAA for assessing some of their components. In terms of language skills to be tested, it is the receptive skills, reading and listening, that can be tested easily using CAA.

The Ministry of Higher Education of Sri Lanka uses CAA in assessing English and Information Technology levels of university undergraduates, which are key performance indicators of a funding project called Higher Education for the Twenty-first Century (HETC).

The two tests, University Test of English Language (UTEL), and University Competency Test of Information Technology (UCTIT) are now online with the overall administration by a consultant at the University of Colombo School of Computing (UCSC). The Wayamba University of Sri Lanka was the first to administer this online test successfully.

# Developing Life Skills of Farmers Through Effective Training Programs

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Training is the process of acquiring specific skills to solve a specific problem and perform a job better (Jucious, 1963)<sup>47</sup>. It helps people to become qualified and proficient in doing some jobs (Dahama, 1979)<sup>48</sup>.

Farmer training is education that most often takes place outside formal learning institutions. It differs from education in schools because it is geared towards adult learning. Adults differ from children in the way they learn. For learning to be effective it has to be relevant to their daily lives.

They need to see immediate results to validate the information based on their experiences. Because of their numerous experiences it sometimes becomes difficult to present new ideas and viewpoints.

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<sup>47</sup> Jucious, M. J. (1963). Personnel Management (5<sup>th</sup> Ed.). Homewood. IL. Richard D. Irwin.

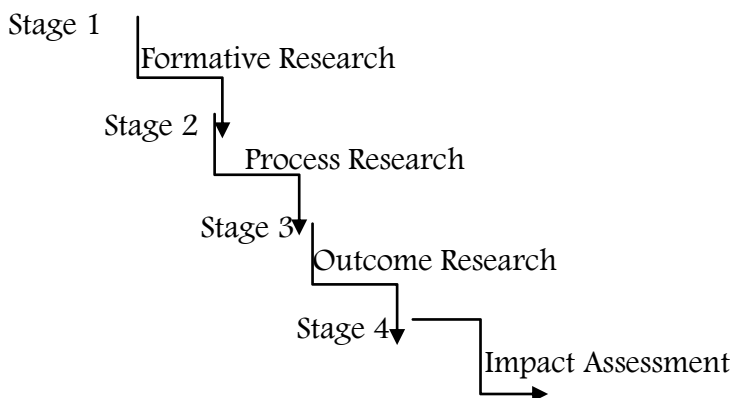
<sup>48</sup> Dahama, O. P. (1979). Extension and Rural Welfare. New Delhi, Ram Parsad and Sons.

Adult learners normally go through some phases of a learning cycle. These phases are experiencing, analyzing, processing and generalizing. Adults have a wide experience and have learned much from life. Learning something new (experiencing) is not just achieved in an instant. The adult learner will have to go back to his old knowledge/skills. It may sometimes be necessary to break apart and review the existing knowledge/skill (analyzing) as well as test the new ideas.

A training program consists of several courses while a training course is composed of several sessions. There are different adult learning theories and models towards training.

### **TIER model**

TIER model indicates that the training activity includes four essential steps such as formative, process, outcome and impact assessments indicated in Figure 1.



**Figure 1: TIER Model**

### **Stage 1: Formative Stage**

Training efforts are conceived, reviewed, and structured. Typically, this stage involves the following research questions: What are the needs and how are they determined? What are the target populations served by the training? How do the goals and objectives of the training relate to identified needs? How will the attainment of these goals be assessed? What instructional approach should be taken? Assessment instruments and training materials are also drafted in this stage.

### **Stage 2: Process Stage**

Training materials, instructional approaches, and research instruments are drafted, proposed and tested in pilot sites. Several typical questions for this stage are: What modifications are needed? Are the materials educationally and pedagogically sound? Are the assessment instruments valid? Is there enough confidence in the approach to warrant higher-cost enhancements (e.g., video, multimedia) and wider distribution of materials?

### **Stage 3: Outcome Stage**

This involves a controlled evaluation study. This stage is primarily concerned with the following questions: Does the approach produce intended outcomes such as increased knowledge, appropriately shaped attitudes, and positive behavioral intent? Are targeted behaviors modified? What are the critical elements of the instructional approach that contribute to desired results?

## **Stage 4: Impact Assessment**

This final stage emphasizes on these questions: Do the approaches under study met the educational needs identified in Stage1? What are the intended and unintended impacts of the training on the learners and their environment? What are the direct effects on the learner? What are the indirect effects on others whom the trainees influence? Why are the approaches studied effective or not?

The TIER model also provides researchers with practical knowledge of training research design and consistency, and with a reliable reference point for launching other investigations. Such benefits complement the primary goals of identifying the critical elements of effective training and creating validated templates.

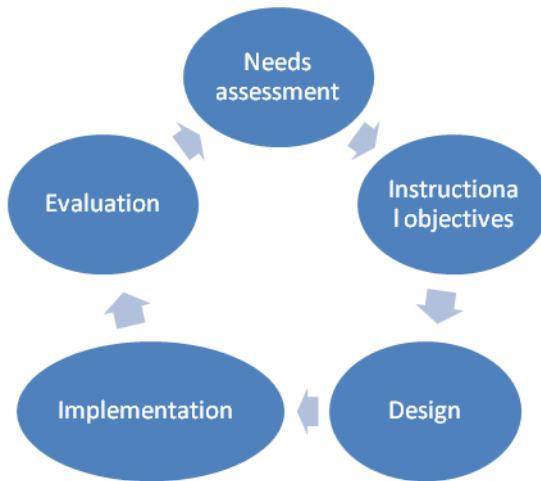
Training is a circular process that begins with needs identification and after a number of steps ends with evaluation of the training activity. A change or deficiency in any step of the training process affects the whole system.

Designing a training and development program involves a sequence of steps that can be grouped into five phases: needs assessment, objectives, session plan, design/plan and evaluation presented in Figure 2. To be effective and efficient, all training programs must start with a needs assessment (Wentling, 1992)<sup>49</sup>.

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<sup>49</sup> Wentling, T. L. (1992). *Planning for Effective Training. A Guide to Curriculum Development*. Rome: FAO.





**Figure 2: Training Cycle**

Training need is a condition where there is a gap between "what is" and "what should be" in terms of incumbents' knowledge, skills, attitudes, and behavior for a particular situation at one point in time. This gap is called "a problem," which usually occurs when a difference exists between "desired performance" and "actual performance."

The needs identification process assists trainers in making sure that they have matched a training program to a training problem. So before conduct the farmers training, better to identify the field problem which are available in this area. Conduct the field survey and interview few of the farmers in village and make a list of problem that farmers suffer. Then priorities the problem list and select what are the

problem that you can resolve or support to the farmers through a training program.

For an example, one of the field surveys conducted in Puliyankulama area identified the problem of heavy use of weedicides by paddy farmers for their paddy cultivation without having of proper knowledge on weeds. They were unable to identify those weeds. In such a situation possible to design a training to identify most important rice weeds and gives a proper knowledge on control measures.

However, some farmers will raise the problem of having low land availability for the farming activities, providing irregular water supply through the irrigation systems etc. But those problems need government attention to solve. So, the proper understanding of a problem helps to design a suitable training program for farmers. Training needs identification is possible through different analytical procedures (McGhee and Thayer, 1961)<sup>50</sup>.

For instance, individual analysis aims at identifying specific training needs for an individual or group of people so that training can be tailored to their needs. This analysis centers on individuals and their specific needs concerning the skills, knowledge, or attitudes they must develop to perform their assigned tasks. The possible methods or techniques for individual analysis include interviews, questionnaires, tests, analysis of behavior, informal talks, checklist, counseling, critical incidents, recording, surveys, and observations.

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<sup>50</sup> McGhee, W. and Thayer, P. W. (1961). Training in Business and Industry. New York. John Wiley and Sons.

Then develop the training objectives. Designing broader and specific objectives helps for the trainer, trainee as well as the donating agents. The best way of selecting this activity is by identifying what is to be able to do once the lesson is finished. The learning material must be defined as concretely as possible.

The objectives should clearly define the applicability of the learning material. The minimum performance must be defined. The learning objective must give some indication of the standard of performance so the farmers can be sure about how the task must be performed.

Thus, to develop the learning objectives one must carefully select the target group for the training. The target group could be varying with the gender, age, educational background of the participants. To conduct the program in smooth way it is better to select suitable target group for the training.

The content of the training course should link directly with the problem which was identified in the needs assessment and the training objectives. The training content can be organized in outline form to help prioritize and sequence the material (Swanson *et al.*, 1997)<sup>51</sup>.

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<sup>51</sup> Swanson, B. E., Farner, B. J., and Bahal, R. (1990). The Current Status of Agricultural Extension Worldwide. In B. E. Swanson (Ed.), Report of the Global Consultation on Agricultural Extension. Rome: FAO.

The end result should be that the training content is presented at the correct level to meet the objectives of the trainees. The training content and flow of information should maintain the interest of the audience.

Once the training content has been outlined and the messages have been identified, training methods can be selected. A training method is a strategy or tactic that a trainer uses to deliver the message so that the trainees achieve the objectives of the program (Wentling, 1993)<sup>52</sup>.

One or more training methods can be used to pass a message to the trainee. It is good to use a variety of training methods throughout a training course to maintain the interest of the trainees. Lecturing is the most frequently used method for delivering a message. There are varieties of other techniques for conveying information to trainees presented in Table 1.

**Table 1: Common Training Methods**

Lecture	<ul style="list-style-type: none"> <li>▪ Mostly an oral presentation, but may be supplemented with visual aids or handouts.</li> <li>▪ The technique is generally confined to presenting only the expert's point of view.</li> <li>▪ Deal of information can be presented in a short period of time.</li> <li>▪ Useful when there are a large group of trainees.</li> </ul>
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<sup>52</sup> Wentling, T. L. 1992. Planning for Effective Training a Guide to Curriculum Development. Rome: FAO.

Lecture/ Discussion	<ul style="list-style-type: none"> <li>▪ Variation of the lecture where the trainer increases trainee participation through facilitation of discussion.</li> <li>▪ Discussion is often initiated through the use of questions.</li> <li>▪ Trainer must plan the discussion and carefully choose the questions to lead the discussion.</li> </ul>
Demonstration	<ul style="list-style-type: none"> <li>▪ Oral explanations combined with visual activities.</li> <li>▪ Method demonstrations show processes, concepts and facts and are especially effective in teaching a skill that can be observed</li> <li>▪ A result demonstration shows the outcome of some practice or innovation, such as field tests of soil treatments or product sanitation procedures</li> </ul>
Group discussion	<ul style="list-style-type: none"> <li>• Trainer leads the trainees as a group through a discussion of a given topic</li> </ul>
Discussion groups	<ul style="list-style-type: none"> <li>▪ Involves every member of the audience in a small group (4 to 20 people per group).</li> <li>▪ Groups may have a pre-selected or self-selected leader.</li> <li>▪ The groups may be given a specific topic or asked to develop a list of problems, issues, priorities, questions, etc. and report back.</li> <li>▪ Discussion groups encourage/allow everyone to participate, even if the audience is large.</li> </ul>

Case Studies	<ul style="list-style-type: none"> <li>▪ Information is given to the trainees detailing a specific situation or problem and the trainees are assigned (as individuals or discussion groups) the task of making recommendations for the most appropriate action to solve the problem.</li> <li>▪ Introduces a practical aspect to the training environment and creates a problem solving situation similar to that many trainees may face after returning to work.</li> </ul>
Field Visits	<ul style="list-style-type: none"> <li>▪ A visit to an organization or workplace, such as a farm or packing house that demonstrates the practical application of the ideas under discussion.</li> <li>▪ Adds a practical aspect to the training.</li> <li>▪ Trainees need to be properly prepared for the visit and should be encouraged to make specific observations that will be discussed upon return.</li> </ul>

Adapted from Carey (1999)<sup>53</sup>

When selecting a training method consider size of the audience. For the larger audience often require more formal training methods rather than the active participation with practical works. But to maintain their attention throughout the training session can use

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<sup>53</sup> Carey, H. A. (1999). Communication in Extension. A Teaching and Learning Guide. FAO, Rome.

different types of training methods. It helps to maintain the interest of the trainees. Once you are selecting the method consider, the resource availability within your institute.

Research shows that most people learn things through at least three of the five senses. The trainer should try to use training methods that appeal to the senses of sight, hearing, smell, taste and touch. In general, instruction by spoken or written word is more effective when it is supported by methods that stimulate the other senses.

When participatory, hands-on methods are used, they serve to convert the symbolism of words into images in the learners' mind. Visual aids and hands-on exercises help make an abstract concept into a practical reality. This improves the chance for storage in long-term memory (improved retention and recall). The more senses to which instruction appeals, the stronger the impact of the message.

Training aids refer to all forms of support prepared for and used in training. Carefully chosen well-prepared materials can make an important contribution to effective learning. They often make it easier for trainees to understand the message as the information can be arranged in a logical, clear manner with emphasis on the most important points. Training aids improve the effectiveness of the trainer.

To develop effective aids, the trainer must think through their message from the receivers' viewpoint. The trainer can feel more relaxed as the aids help insure the flow of information. Aids may also help

trainers feel less pressure as the trainees are focused on the training aid for part of the time.

Visual aids are especially useful in reinforcing the key points made by the trainer in an oral presentation. They can be very useful in describing points that are difficult to explain verbally. Anything that can be quantified or is realistic can be presented visually. Visual aids should be tested on others before using them in the training room.

It is also important to check the availability of equipment needed for visuals both in planning for their use and on the day of the presentation. A variety of print materials can be used to enhance the learning process. These may include handouts, summary notes, workbooks or manuals. They have a clear advantage in that they provide a summary and/or can present additional information and can reduce note taking.

They can be made available to the trainees for reference after the training session. A disadvantage is that these materials may distract from the trainer. Care must be taken to insure that trainees are not overwhelmed by so many print materials that they lose focus on the trainer.

When the training course takes place over several hours or a number of days and different types of information are covered, a team of trainers may be used. An advantage of a team approach is that the diversity of different trainers makes the course more interesting. It can become difficult to maintain attention if trainees have to listen to one trainer for an extended period. The members of a training team should be



chosen to ensure they have complementary styles, skills and knowledge.

All trainers should be technically competent in their subject and have experience as a trainer. Team members must have credibility with the trainees. Trainers need to be willing to participate in the total training activity. In addition to these issues there are logistical arrangements that need to be considered before, during and after the training course. The trainer should ensure that the logistical support arrangements are in place and satisfactory to accommodate each session of the training course.

In addition to these issues, there are logistical arrangements that need to be considered before, during and after the training course. The trainer should ensure that the logistical support arrangements are in place and satisfactory to accommodate each session of the training course.

The following sample list includes key points that the trainer may consider.

***Before the Training:***

- Identify and engage appropriate instructors
- Select suitable training venues (well-ventilated with adequate space away from sources of noise/ venue can be public hall of the village, on farm location, household etc.)
- Select and notify the trainees, through the proper channels, of the dates, time and location
- Prepare training materials: handouts, overheads, etc.

- Arrange for appropriate training equipment (may include microphone, chalkboard and chalk, flipchart paper, writing materials, slide and/or overhead projector, LCD projector and computer, video equipment, screen, spare bulbs, etc.)
- Arrange training room, seating arrangements, name cards, position of chalkboard, screen, etc.
- Arrange coffee and meal breaks during course
- Arrange transportation/accommodation as needed for outside speakers/trainers
- Prepare a budget and take the approval from funding agency.

### *During the Training:*

- Remind other trainers of their sessions
- Introduce and thank trainers
- Meet emergencies (rearrange or cover sessions)
- Check facilities and equipment (projects, boards, chalk, etc.)
- Ensure trainees receive course materials
- Have trainees introduce themselves
- Introduce visitors

### *Following the Training:*

- Leave room tidy – return equipment and aids to proper place
- Compile feedback/evaluations from course participants
- Prepare thank you letters as needed for guest speakers, volunteers, etc.

Since there are many details to remember when making the final arrangements for the training course, trainers may wish to develop more detailed checklists to support them in their preparation for the training.

Evaluation is presented as the final portion of the discussion on developing effective training, it is important to plan the evaluation strategy well before the training takes place. Evaluation is not merely an activity at the end of the training course, but is an on-going process throughout the training that allows the trainer(s) to assess how well the course is progressing and that objectives are being met.

Training evaluation has been described as a systematic process of collecting information for and about a training activity which can then be used for guiding decision making and for assessing the relevance and effectiveness of various training components (Raab *et al.*, 1987)<sup>54</sup>.

There are four evaluation strategies available such as: (1) Pre-training; (2) Process; (3) Terminal, and (4) Follow up evaluation. The choice of evaluation strategy depends on the purpose of the evaluation (Hakimian and Teshome, 1993)<sup>55</sup>.

Pre-training evaluation occurs during course development and allows for pretesting of the adequacy, scope and coverage of the training program under

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<sup>54</sup> Raab, R. T., Swanson, B. E., Wentling, T. L. and Dark, C. D. (Eds.). (1987). *A Trainer's Guide to Evaluation*. Rome: FAO.

<sup>55</sup> Hakimian, H. and Teshome, A. (1993). *Trainers' Guide. Concepts and Principles*.

preparation. This type of evaluation checks out shortcomings of the training and allows corrective steps at an early stage. Pilot tests of presentations and materials are part of pre-training evaluation. Process evaluation is conducted while the course is in progress.

This ongoing assessment allows for adaptations to be made during the course as needs are identified. This evaluation may involve a formal evaluation where feedback is sought from trainees at the end of each day, each session or on a particular schedule. Also included may be observations by the trainer regarding trainees' responses. Terminal evaluation occurs upon completion of the course.

This type of evaluation allows trainers and trainees to assess how well course objectives were met and where adjustments are needed for future training efforts. Follow-up evaluation is usually conducted at some point after the training. Since a training program is often conducted to bring about changes in behavior or attitudes related to the working methods of the trainees, training effectiveness is best assessed following a lapse of time, for example two months, after the training course.