ASSESSMENT IN FOCUS

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Assessment in Focus is dedicated to disseminating information and revealing developments at the Testing Center, as well as sheding light on aspects of educational measurement and evaluation issues. This effort is made to assist SMU and other similar institutions in their endeavors to enhance the development and maintenance of standardized and quality education.

Editor's Note

Assessment in focus is a biannually published newsletter most dedicated to giving highlights on educational issues and progress of the activities at the Testing Center of St. Mary's University. The most significant of all is that the Testing Center of SMU administers local and international tests based on the request of those who need its assistance. These are: Test of English as a Foreign Language (TOEFL) Graduate Record Examination (GRE), Praxis Administration (PA), Chartered Institute for Securities and Investment (CISI), Aptitude and Employment Tests, all of which are in high demands with an increasing number of beneficiaries. Besides,TC provides short term trainings to the University staff as well as others depending on demands to fill gaps aimed at improving the outputs rendered to customers.

In this issue, articles related to general knowledge for readers: like Principles of Good Teaching and Their Implication for Testing, Counseling Theories and Approaches, Four Different Types of Learners, Academic Procrastination Among University Students, On Writing Right as a Fundamental Right, The Legacy of Michel Pupin, and Essentials of Health Education are included. It also displays the services provided by the Testing Center of SMU and St. Mary's University at large. Scan for other details.

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Procrastination is the act of delaying or putting off tasks until the last minute or be unable to meet the deadline set before. Some researchers define procrastination as a "form of self-regulation failure characterized by the irrational delay of tasks despite potential

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Some Selected Activities at the Testing Center (TC) of St. Mary's University (SMU)

Different activities have been carried out by SMU's experienced professionals at the TC over the last few months of 2021 G.C. Some of these activities include the following:

Improving Outreach Services and Partnership

To select efficient workers for different organizations, employment tests were prepared and administered to seven job positions; namely: Secretary, Executive Secretary II, Accountant, Junior Accountant, Senior Accountant, Finance and Grant Officer, and Finance Group Leader, etc.

To help customers become competent internationally, 40 test sessions of Test of English as a Foreign Language (TOEFL) were conducted. These sessions had a total of 395 registered candidates. Likewise, 10 test sessions of Graduate Record Examination (GRE) for 36 registered candidates and three test sessions of Praxis Administration (PA) for six registered candidates, and five sessions for 49 registered candidates of Chartered Institute for Securities and Investment (CISI) were conducted..

Improving the Quality of Assessment Tools

To improve the quality of assessment tools, item analysis was conducted for the Under Graduate Program (UGP) of SMU for the academic year 2012 and 2013 EC for 45 UGP course exams. These courses were randomly selected from the Department of Accounting & Finance, Marketing Management, Management, Computer Science, Tourism & Hospitality Management and Basic courses.

Comparative analysis for selected courses of 2011-I and 2011-III exams of CODL was done and the result was presented to the three departments of the Testing Center Academic Staffs' with the aim of improving assessors' assessment tools preparation.

Entrance exam was prepared and administered by TC to 1st year 2013 E.C UGP students from TVET to degree program.

To assure the completion of graduating students, Comprehensive Degree Exit Exam (CDEE) was conducted for 2013 E.C regular and extension program prospective graduates of 5 departments.

Likewise, TC assisted the preparation of 3rd quarter model exams of Kidist Mariam Schools (KMSs) and conducted item analysis. The item analysis feedback report was given to concerned bodies aimed at taking the necessary supportive and pedagogical measures.

Training was conducted on Test Blueprint and Criterion Referenced Assessment (CRA) for Under Graduate Program (UGP) with the purpose of improving the preparation of assessment instruments. .

Collaborative Activities with CODL Staff

In order to access enough exams in the stock, TC was engaged in the preparation of newly arriving courses in collaboration with CODL's staff beginning from 2020/21 G.C.

In the same manner, TC academic staff participated in marking CODL Degree Exams of 2013-I. In relation to this, members of the Testing Center's academic staff were able to get feedback about the questions they had prepared. They also marked 2,775 exams of the four departments; namely: Accounting, Management, Economics and Basic Courses.

Improving Research Output of the University

A research entitled "Staff Response on Contract Cheating," was conducted.

In order to improve services rendered to customers, the Quality Enhancement Committee has done customer satisfaction survey of TOEFL conducted and feedback report provided to all concerned units and sections.

Training Services

To update TC's staff with the current practice of online assessment, a half day training was conducted on Computer Software and Hard Ware Practices, under the title "On line Assignment and Exam Delivery". The training included: How to Use the Online Learning Management System for Administration, Documentation, Tracking, Reporting, Automation and Delivery of Educational Courses. In this training, the staff exhibited their satisfaction through hot discussion.

TC staff members on the half day training

In light of the above, we should all note that a proper training adds an additional motivation which may result in an extraordinary performance.

Principles of Good Teaching and Learning: its Implication for Testing

Wubishet Shiferaw (Ph.D), SMU, TC

Remembering and using knowledge are the essence of education. It is a waste of time and scare resources to teach students, facts and skills that they are unable to access and use when appropriate. Students attend school to learn to think and solve the numerous academic and real-life problems they encounter throughout their personal and professional lives, to become independent thinker and to solve problems.

Redesigning tests to measure deep-level understanding, higher order thinking, and the application of learning to real-life situations can help to promote changes in classrooms.

Before a review of the basic principles of teaching, a brief discussion of higher order thinking is necessary because it is the primary goal of teaching- learning and underlies these principles.

A common representation of higher order thinking is Bloom's Taxonomy of Education Objectives which are useful for developing tests that measure higher order thinking and for classifying good principles of teaching and learning.

The basic principles of instruction is aimed at fostering meaningful and useful teaching and learning in which students think, reflect and solve academic and real–life problems.

The following six basic principles must be structured into the curricula, textbook, and instruction before better testing system is implemented.

1. Cover Important Topics in Depth

Instead of simply exposing students to information, they must be provided with experiences that allow them to learn the knowledge at much deeper level than is typically provided in curricula and text books.

Overburdened curricula leave little time for students to study anything in depth and, leads to superficial learning that is soon forgotten. Students have little time to process what they learn or to connect the new information to what they already know or learn in other subjects. Based on overburdened curricula, overburdened text books cover too many topics and then after provide meager and disjointed explanations and complex ideas which initiate memorization instead of conveying deep-level meaning and understanding.

Its Implication for Testing:- If curriculum and text books cover too many topics and cover them superficially, the preferred strategy is to redesign curricula, text books, and tests to promote deep-level learning and real understanding of what has been learned, so that they are coherent and consistent instructional tools. A test can be redesigned to direct the instructional focus to more integrated skills and to promote analysis, reasoning, connectedness, and real life applications.

2. Make instructions Coherent

Coherence is what holds bits and pieces of information/ideas together and connects new content to existing knowledge and experiences. If an instruction does not make sense and is not coherent, students cannot remember it or use it. The more connections a person can make in relation to the topic, the more likely the person is to remember and use the knowledge. Another way to expand connections is to help students understand how new information connects to what they already know, to their life, and to what they have previously learned. For knowledge to be coherent, it must be organized. One powerful way of organizing knowledge is through the use of concepts. They are the major structures for organizing knowledge and should be a primary focus in measuring students' understanding.

Its Implication for testing:- There are several ways that tests can be designed to promote coherence, connectedness, and organization. If test questions ask students to organize and structure what they have learned, it will help them see how knowledge is organized in a way that they can remember and access later. Restructuring knowledge helps students make more connection to what they already know and see a greater variety of ways the knowledge can be used.

Tests should emphasize measuring concepts and principles more than factual knowledge. Questions that emphasize coherence also will encourage students to reflect rather than simply to recall. Reflection helps students see the coherence of knowledge and helps them to understand things at a deeper level.

3. Promote Active Learning

Active learning stimulates more connections and is simply more fun. To expand the number of connections students' make, teachers should give students a variety of ways to learn (such as talking, debating, acting and writing stories and reports). The more students' five senses are involved in learning, the more the connections and the representations will have been in relation to new contents.

Active learning takes more time than does reading the text, filling out worksheets and answering or recalling questions. The amount of material covered in the curriculum and textbooks is a critical factor

teachers consider when determining time for active learning. If there is too much material to be covered, active learning will be discarded in favor of the quick learning approach.

Its Implication for Testing:- Examinations require students to be actively engaged in order to respond questions. Performance tasks require students to work individually, in pairs, or in small groups to solve problems

Use Real-life Tasks

Often students do not know how knowledge is used in situations that are different from the one in which knowledge is learned. An important aspect of having ability is its transfer ability. That is, students must be able to use what they learn in a variety of appropriate situations. It is important that teachers, texts, and examinations all emphasize applying or transferring newly learned knowledge to various situations. Teachers should tell and show students how the new knowledge or concepts can be used in many situations, and they should give students practice in applying what they learn in real – life situations.

Its Implications for Testing:- Questions should be related to real-life experience. Students might be asked to compare situation, solve problems using the knowledge imparted.

4. Make Students Aware of their Learning

Students are more likely to access and use what they have learned if they are aware of what they know about a topic. Writing and verbalizing help students see the inconsistences in their thinking, which can help them to resolve these in consistencies. Any activity aimed at enhancing students' awareness should be consistent with the objectives of the lesson, and students should be reminded of the objectives-before, during, and after the lesson.

Its Implications for Testing:- To promote students' awareness of what they are learning, tests should ask students to write about the content in a way that helps them consolidate what they have learned; or they should direct students to compare common and dissimilar textures across situations. Assessment strategies can be used to help students identify gaps/ inconsistencies in their understanding of the topics.

5. Teach Students how to manage their learning

One of the descriptions of higher order thinking is that it involves a student in regulating his/her own thinking process. Another description states that higher order thinking is not likely to occur when students are told to do every step; and a third description is that higher order thinking quire effort. Teachers should give students opportunities to direct and manage their own learning and should make explicit what this involves. Teachers also should encourage students to analyze their own and others' approaches to learning and discuss what they can do to be more efficient and effective.

Its Implications for Testing:- Asking students to indicate what they read, how working in a group helps them understand and plan what they write. Students could also be told to underline and take notes in the test booklet to help them read the passage and write their response to the questions.

Source: Capper, Joanne (1996).Testing to Learn-Learning to Test, USA. P4-23.

Counseling Theories and Approaches

Gezahegn Zewdie, SMU, TC

Psychotherapy theories provide a framework for therapists and counselors to interpret a client's behavior, thoughts, and feelings and help them

navigate a client's journey from diagnosis to post-treatment. Theoretical approaches are an understandably integral part of the therapeutic process. But with so many different methods out there, how do you know which counseling approach works best for you? Whether you're a student learning about counseling theories or a client looking for the right therapist, the following detailed descriptions will give you a deeper understanding of each counseling method. These theories include Psychoanalysis/ Psychodynamic Theory, Behavioral Theory, Cognitive Theory, Humanistic Approach and Holistic/Integrative Therapy and are integrated throughout the curriculum to build the foundation grounded in the psychodynamic perspective.

1. Psychoanalysis /Psychodynamic Theory

Psychoanalysis or psychodynamic theory, also known as the "historical perspective," has its roots with Sigmund Freud, who believed that there were unconscious forces that drive behavior. The techniques he developed, such as free association (freely talking to the therapist about whatever comes up without censoring), dream analysis (examining dreams for important information about the unconscious), and transference (redirecting feelings about certain people in one's life onto the therapist) are still used by psychoanalysts today.

Counseling uses this theory to train counselors, and it is embedded throughout the counselor training process. In general, psychotherapists and counselors who use this approach direct much of their focus and energy on analyzing past relationships and, in particular, traumatic childhood experiences in relation to an individual's current life. The belief is that by revealing and bringing these issues to the surface, treatment and healing can occur. This theory is highly researched, and as the field of neuroscience advances, counselors are finding how psychodynamic theory can actually positively affect a client's brain. Psychodynamic theory can be more time intensive in comparison to some short-term theories because it involves changing deeply ingrained behaviors and requires significant work on understanding one's self.

2. Behavioral Theory

Behavioral theory is based on the belief that behavior is learned. Classic conditioning is one type of behavioral therapy that stems from early theorist Ivan Pavlov's research. Pavlov executed a famous study using dogs, which focused on the effects of a learned response (e.g., a dog salivating when hearing a bell) through a stimulus (e.g., pairing the sound of a bell with food).

B. F. Skinner developed another behavioral therapy approach, called operant conditioning. He believed in the power of rewards to increase the likelihood of a behavior and punishments to decrease the occurrence of a behavior. Behavioral therapists work on changing unwanted and destructive behaviors through behavior modification techniques such as positive or negative reinforcement.

3. Cognitive Theory

In the 1960s, psychotherapist Aaron Beck developed Cognitive theory counseling theory focuses on how people's thinking can change feelings and behaviors. Unlike psychodynamic theory, therapy based on cognitive theory is brief in nature and oriented toward problem solving. Cognitive therapists focus more on their client's present situation and distorted thinking than on their past. Cognitive and behavioral therapy are often combined as one form of theory practiced by counselors and therapists. Cognitive behavioral therapy, or CBT, has been found in research to help with a number of mental illnesses including anxiety, personality, eating, and substance abuse disorders.

4. Humanistic Approach

Humanistic therapists care most about the present and helping their clients achieve their highest potential. Instead of energy spent on the past or on negative behaviors, humanists believe in the goodness of all people and emphasize a person's self-growth and self-actualization.

Humanistic theories include client-centered, and existential therapies. Carl Rogers developed client-centered therapy, which focuses on the belief that clients control their own destinies. He believed that all therapists need to do is show their genuine care and interest. Gestalt therapists' work focuses more on what's going on in the moment versus what is being said in therapy. Existential therapists help clients find meaning in their lives by focusing on free will, self-determination, and responsibility.

5. Holistic/Integrative Therapy

Holistic and integrative therapy involves integrating various elements of different theories to the practice. In addition to traditional talk therapy, holistic therapy may include non-traditional therapies such as hypnotherapy or guided imagery. The key is to use the techniques and psychotherapy tools best suited for a particular client and problem.

There are various therapies that counselors can choose to study, but the type of theory matters less than the success of the relationship between client and therapist. In the online Master of Arts Counseling Program, students are prepared to become self-reflective practitioners and learn to examine the factors that influence the client-therapist relationship to become successful counselors.

Source: https://counseling.northwestern.edu/five-counseling-theories-and-approaches

Four Different Types of Learners

Degefa Burayou, SMU, TC

Remember when you were in school and you had to cram hundreds to few pages of textbook materials into your head before every big test. If you were like most students, you and your friends probably developed all kinds of tactics to make the grade. Maybe, you made flash cards, or reviewed recordings of your professional lectures, or came up with intricate mnemonic devices to memorize the material at hand. You may have argued with your classmates about which method was best- but the truth is that, one size does not fit all.

Sociologists and psychologists have developed a number of different models to understand the ways people learn best. One popular theory, the VARK model, identifies four primary types of learners: visual, auditory, reading writing, and kinesthetic.

Each learning type corresponds best to a different method of teaching. Auditory learners remember information best after reciting it back to the present, while kinesthetic learners jump at the chance to participate in hands-on activity. When it comes to remote setting, people tend to prefer learning visually.

Every presenter that stands up in front of an audience or presents online wants to be understood. But when your audience is equipped to learn best in distinctly different ways, how do you make sure that you get your message across to everyone? The consequence of these learning styles reaches beyond the classroom. If you want to educate a large group of people, no matter what the setting, you need to know how to engage each of the four learning styles. Luckily, there are simple things you can do at the moment to make sure you are catering to every kind of learner in your audience,

whether you are speaking to hundreds of attendants or 30 coworkers in a small session. Therefore, the psychology of learning is a theoretical science that covers the various psychological theories that relate with learning other theories, such as those related to motivation, like the growth mindset, focus more on the individual. As a result, they are very applicable today.

Throughout history, there have been various psychological learning theories. Some take on a more behaviorist approach which focus on inputs and reinforcements. Other approaches, such as theories related to neuroscience and social recognition, focus more on one's interaction with the environment and other settings. Other theories, such as those related to motivation, like growth mindset, focus more on the individual. Many educators assert that psychology of learning is very applicable today. In relation to this, there has been extensive research in recent years that looks closely into how students are learning both inside and outside the classroom. This information is then used to present new and more cooperative approaches to homework, test and the student's ability to learn. Theories related to the psychology of learning can also help explain and improve students' performance, motivation, and investment in their learning

Academic Procrastination among University Students

Degefa Burayou, SMU, TC

Performing tasks and assignments is common among university students. In relation to this, procrastination is defined by Johnson, Green and Kluer (2000), as delaying work that needs to be accomplished before a deadline. When it becomes a culture of individuals, procrastination becomes a severe problem for students, as it has adverse effects on their actions and generally it brings about devastating consequences to the society. Procrastination can cause self-blame, regret, weak academic accomplishment and lack of opportunities. Some others argue that the tendency to delay tasks is a personality trait rather than ineffective time management. It is a complex phenomenon having several types in arousal procrastination, the individual procrastinations for amusement and suspense.

In avoidant procrastination, the individual procrastinates to protect themselves or out of fear, which are all behavioral procrastination where the individual delays decisions.

Regarding procrastination, Valdes (2006) identifies three patterns of unconcerned students. They just seek success and appeal for help in the last moments they procrastinate too much. Target-oriented and passionate students, on the other hand, students with high procrastination have weak achievement.

Other negative effects of procrastination include hatred for study, low self-esteem, and fear and anxiety of failure.

According to scholars, procrastination can result from several factors: it could be due to weak time management, lack of ability to concentrate, failure related fear, anxiety, and low level of mindfulness.

Explanations of procrastination varied from a psychological school to another. For example, behaviorism viewed procrastination as an acquired habit that stems from the individual's preference for activities with immediate awards. Psychoanalysis attributed procrastination to over- handicapping as causes of procrastination. Not all procrastinating behaviors are negative. Based on personality traits, there are passive procrastinators who make intended procrastination decisions and use high motivations

under time pressure and can complete tasks in specified times.

As expounded by other educators, the relationship between academic procrastination and both self-efficacy and anxiety about the future on a number of students were found with positive w relationship between academic procrastination and self-efficiency. However, no similarity was found between academic procrastination and anxiety about the future.

On the other hand, significant difference was found in the strength of the relationship between life stressors and academic procrastination in fever of male students. In addition, no significant difference was found in the strength of the relationship between life stressors and academic procrastination by academic level. From the investigation done on females and males, procrastination among male was higher than among females.

The causes of procrastination included repelling tasks, fear of failure, instructor style, risk taking, classmate pressure, and resisting discipline control. As a result significant differences were found by academic level. On another accession, As a number of studies show, the relationship between academic procrastination and time management among college students were found to have very low levels of academic procrastination.

However, their time management was weak; and the relationship between academic procrastination and time management was also weak.

In the same manner, it was explored that the psychological causes of academic procrastination and the effect of the causes on the learning of a number of university students result revealed a negative impact of procrastination on learning and achievement motivation.

On the same topic, Balkis and Duru (2009) investigated the prevalence of academic procrastination among student teachers and its demographic valuables and individual preferences. Results revealed that some 23% exhibited a high level and 27% exhibited an average level of procrastination. Thus, procrastination was found to be decreasing with age.

In conclusion, attention is a prerequisite for learning to take place as it enables students to select suitable stimuli from the external environment. Individuals often pay attention to new stimuli whereas; alert students are fully aware of their environment and show greater attention and desire to perform tasks. So, students are required to take notes, and should be attentive during lectures because it affects their achievement negatively. They should also submit assignments before deadlines. With this regard, we have to recognize the role of advisors to curb such distractors among students at all levels that it is highly important.

Source:

1. Hasker, S.M, (2010). Evaluation of mindfulness acceptance commitment (mas) approach for enhancing athletic performance. Unpublished Ph.D Dissertation, Indiana University of Pennsylvania

2. Ismael,HalaKhairy, (2017), Psychological flexibility and its relationship to mental alertness among students of the College of Education, Journal of Psychological Counseling, 5(1)

6. Al Walid, Ali bin Muhammad. (2017). Mental alertness and its relationship to psychological happiness among students of King Khalid University. King Khalid University Journal, 28

8. Johnson,E..,Green,K.& Kluere, R. (.2000).Psychometric characteristics of revised procrastination inventory. Research in Higher Education,41(2),267-279.

Balkis,M.& Duru,E. (2009).Prevalence of procrastination behavior among pre-service teachers and its relationship with demographics and individual preferences. Journal of practice in Education,5,18-32.

On Writing Right as a Fundamental Right

Kebede Kassa, (PhD)

Writing is one of the most challenging exercises. There are a number of reasons for this. In the first place, writing is a process, never an end product by itself. You draft an essay or a term-paper. Read it twice or trice and you may think that it is done. Bravo! But wait a moment! Keep your master piece aside for two or so days; go back to it, read it again with fresh appetite. Surely, you will find myriads of mistakes of various sources. As a writer, you usually read what is correct in your head. Your hand, however, commits some silly, at times, perhaps, disturbing mistakes. I am saying your hand because it is often easy to blame your hand or your secretary, rather than your head or your honorable self. In the second place, a written work is nourished through sharing. But you don't often share. You have many excuses for this. Just think of three major ones: conceit and over-confidence – you feel that you have done it right and no one has your level of competence to correct your errors; fear of criticism or 'yilugnta(ይሉኝታ)', the anticipation of what others would say about your work; and utter reticence, often embedded in your culture. Like the traditional healer who keeps his art extremely secrete, you feel that nobody should know what you do. You feel that if others see your work in progress, they would either ridicule you or talk about it to others before you bring it to life. While confidentiality may not be bad in itself, it could deny your work the benefit of getting insights from your colleagues, professional or otherwise.

The third reason that makes writing quite challenging is that you tend to write long and winding sentences. In the process, you miss even basic grammatical rules you studied in grade six: subject, verb structure; number -tense (time) agreement; spelling and mechanics (capital letters, commas, full-stops, etc.).

Listen! As the saying goes, 'necessity is the mother of invention'. Don't worry about who said it. The truth of the matter is, you are challenged by missing skills that are necessary for effective writing. You are not alone! There are millions of people around the world, even among native speakers, who do face this same challenge. The reasons are too many as well. But you don't need to dwell too much on the root causes. Do you? No! You don't have time for that.

What you need to do right now is to respond to it right from today. Remember, you are in a historic moment of rapid globalization. You can be part of it only by communicating well; in particular by writing well. The urgency to write right is one of the pressing needs of the time. What is more, writing is not only a necessity; it is also a right. Please note: writing well is one of your many fundamental human rights. It is yours to enjoy. You deserve it and no one can deny you this God-given gift. True, like all human rights, you need to fight for it. No freedom comes without an expense. That expense, which doesn't need any of the pennies in your pocket, is your willingness to sacrifice a bit of your time, every day, to build your own [remember your own, not somebody else's] skills to write right. You can do it by regularly engaging in these three tasks:

(i) Always-write - make writing one of your daily habits or hobbies, at least one paragraph a day; you may make mistakes, it is okay, but you should continue to write. Unless you write, you will not know whether or not you have deficiencies; have you ever heard that 'Rome was not built in a day'?

(ii) Edit it yourself – after going through all the hardships in getting your ideas onto paper, you often find it boring reading your own work again and again. I am like you and hate going through it again. From now on, you must be different from me: read, re-read and edit your own draft before you give it to me or to anyone of your confidants. The basic principle here is revising, revising, revising, and revising until you finally 'fall in love' with your master piece;

(iii) Share it, now that your paper has been done so nicely, it is time to let others find fault with it; in order to build strong confidence, start sharing your final, final draft with friends, office-mates, and even your slightly learned family members. They can help you clean-up its final weeds. By so doing, you can refine your skills for writing right and enjoy as well as protect your right to write.

The Legacy of Michael Pupin

(1858-1935)

Wondwosen Shimelis, SMU, TC

Down through years, famous people in both the arts and in the science have by their greatness endowed future generations with a rich legacy. In isolated instances, some of these men of genius were as apt in imparting their wisdom to others as they were in cultivating fields of knowledge and creativity, where to mind had tilled before.

As music, where Beethoven learned his lessons well from Bach and in philosophy where Plato tutored his protégé Aristotle, Michael Invorsky Pupin, American physicist and inventor, through his research at Columbia university, fathered the chain of learning which has provided a rich heritage in electrical engineering at REL through his successors Edwin H. Armstrong and James R. Day.

Pupin, one of the founders of Columbia's now renowned electrical engineering department, was the respected teacher of many future telecommunications pioneers; included in this array was the late Major Edwin H. Armstrong, inventor of FM radio research. Armstrong encouraged by Pupin, performed much of his basic research in the Columbia laboratories, and for years the two men worked together on the investigation of static, the biggest problem of wireless telegraphy.

Major Armstrong, in his turn, offered in encouragement to REL's late vice president of engineering and research, James R. Day. Mr. Day, who worked with Major Armstrong at the Columbia laboratories for six years, carried on the tradition by imparting his knowledge and encouragement to REL`s eager engineering staff.

Pupin himself was a product of Columbia and had studied abroad under the noted German physicist Hermann Von Helmholtz.

Inventor physicist Pupin was born in Idvor, Hungary of Serbian ancestry. In 1874, when he was 16 year old, the future pioneer emigrated to the United States, and a few years later he entered Columbia College in New York.

Upon graduating from Columbia in 1883, Pupin went to Cambridge and berlin where he went to Cambridge and berlin where he continued his studies in mathematics and physics. When he returned to America in 1889, he was appointed Instructor in mathematical physics at his alma mater.

Pupin's scientific talents were easily recognized and his rise on the academic ladder was swift. He was soon named an adjunct professor, and in 1901, just 12 years after his first academic appointment, was elected to a full professorship in electro mechanics.

Pupin‘s enormous energy and curiosity however, would not allow him to be content with a single channeled career, and even while he busied himself with his teaching ,he was constantly conducting researchers in may scientific areas. It followed naturally that he be appointed to head the Marcellus Hartley research laboratory, devoted to the basic study of electrical phenomena.

Professor Pupin conducted his most important work in the study of electrical wave propagation, a field in which he applied his research to long distance radio telephony and multiplex telegraphy. The famous up in loading coil, a device for stepping up the electromotive force of a current, interposed fixed inductances at calculated intervals along a telephones line to almost double the range of long distance telephony. His inventions also included a method of electrical turning which was widely used in telegraphy and later in radio.

In 1923 Pupin once again proved his unique versatility in his autobiography, ‘From immigrant to inventor’ was awarded turned in Pulitzer Prize. In 1927, he authored another book ‘New Reformation’ from physical spiritual realities listed among his many honors was the presidency of the American Institute of Electrical engineers for 1925-26. In the same years, he served president of the American Association for the Advancement of Science, and in 1928, he was awarded the Washington medal for engineering.

Source: Telecommunication pioneers

Polished by radio engineering laboratories INC long island city, New York 1963

Quotable Quotes

1. An investment in knowledge pays the best interest.

Benjamin Franklin

2. Change is the end result of all learning.

Benjamin Franklin

3. Effort is not here and there. Effort is daily.

Arsen Wenger

4. Education opens up the mind, expands it and allows you to improve your life in so many ways.

Henrik Edberg

5. A man’s mind, stretched by new ideas, may never return to its original dimensions.

Oliver Wendell Homes Jr.

6. “Start where you are. Use what you have. Do what you can.”

Arthur Ashe

7. “It is health that is real wealth and not pieces of gold and silver.”

Mahatma Gandhi

8.“To insure good health: eat lightly, breathe deeply, live moderately, cultivate cheerfulness, and maintain interest in life.”

William Londen

9. ‘A mind is like a parachute. It doesn’t work if it isn’t open.”

X Declutter

10. “Mindfulness means paying attention in a particular way, on purpose, in the present, and non-judgmentally.” “The perfect moment is this one.” “You can’t stop the waves, but you can learn to serf.” “The best way to capture moments is to pay attention.”

http://declutterhimind.com<org>

11. It is not fair to ask of others what you are not willing to do yourself.

Eleanor Roosevelt

12. There came a time when the risk to remain tight in the bud was more painful than the risk it took to blossom.

Anais Nim

13. “What new technology does is create new opportunities to do a job that customers want done.”

Tim O’Reilly

14. Any sufficiently advanced technology is indistinguishable from magic.

Arthur C. Clarke

15. Technology gives us power, but it does not and cannot tell us how to use that power. Thanks to technology, we can instantly communicate across the world, but still doesn’t help us know what to say.

Jonthan Sacks

16. Teaching is conceptual and intellectual, abstract and concrete, creative, and sequential. It’s about people but framed through ideas. It’s about content, hearts, minds, the past, the future-whatever we can imagine, teaching and learning are both causes and effects.

Jacques Barzun

St. Mary's University

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- Computing Science

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- Financial Economics
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- Agricultural Extension
- Agri-Business Management
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- Cooperative (Business Management)
- Educational Planning & Management
- Economics
- Sociology
- Public Administration and Development Management
- Agricultural Economics
- Banking and Finance
- Logistics and Supply Chain Management

Graduate Programs Offered in Partnership with Open University of Tanzania (OUT)

- Master of Project Management
- Master of Arts in International Cooperation & Development
- Master of Science in Economics
- Master of Human Resource Management

Postgraduate Programs (Regular)

- MSc in Quality and Productivity Management
- MA in Social Work
- MA in Development Management
- Master of Business Administration(MBA)
- MBA with HRM Concentration
- MSc. in Agricultural Economics
- MA in Project Management
- MBA in Accounting and Finance
- MA in Marketing Management
- MA in Development Economics
- MSc. in Computer Science
- MA in Higher Education
- MA in Sociology

Graduate Programs Offered in Partnership with Universita Cattolica del Sacro Coure, Italy

- MBA in Impact Entrepreneurship

Graduate Programs Offered in Partnership with IGNOU (Distance)

- MBA (Master of Business Administration)
- MSW (Master of Arts in Social Work)
- MEC (Master of Arts in Economics)
- MPA (Master of Arts in Public Administration)
- MARD (Master of Arts in Rural Development)
- MSO (Master of Arts in Sociology)
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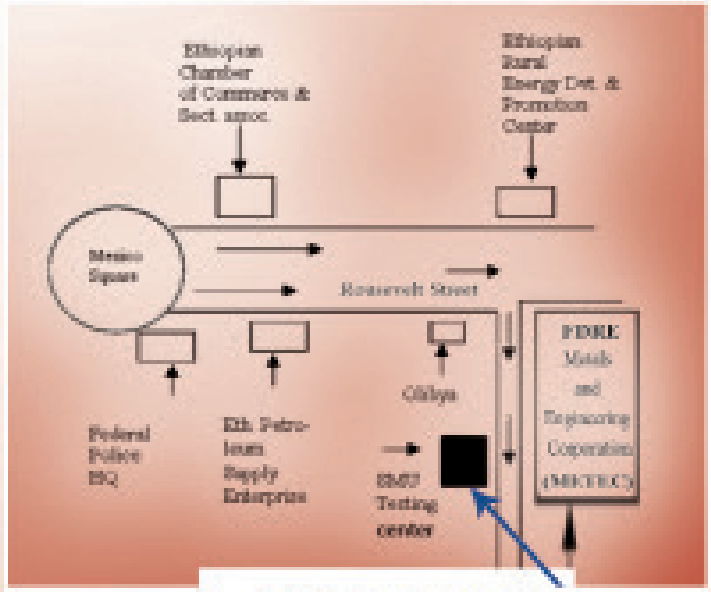

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