

Moving Physiotherapy Forward in Africa: International Long-Distance Education Collaborations using Latest Information Technologies



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Objectives

- Sensitize African nations to a need in paradigm shift away from traditional PT Education methods and strategies
- Encourage the use of modern technologies to access the almost unlimited educational resources available for PTs
- Encourage international collaborations between
 - ▣ African PT training programs
 - ▣ African PT programs and those of nations outside Africa
 - USA, Canada, Europe, Australia, etc
- Outline currently available IT for long-distance education and International collaborations

Presentation Outline

- The burden of Brain drain on African PT Education
- Need Assessment for Change in African PT educational methods and strategies
- Long-distance education methods
- Information technologies for African PT Education
- International Collaborations
 - ▣ Case Studies, proposals and a testimony
- Discussions, Comments and Questions

The Brain Drain Challenge: Africa in need of PTs and PT Educators!

- A dearth exists in Africa for
 - ▣ physiotherapy professors, clinical instructors, researchers and clinicians

- Africa's loss is gain to other nations of the world
 - ▣ Best African physiotherapy brains 'drained' to developed nations
 - ▣ The more physiotherapists we train, the more we lose to other nations outside Africa
 - We are unable to keep what we have or made

Africa needs Solution to 'Brain Drain'

- Let's come to terms with these facts:
 - Africa may be unable to keep her best physiotherapy 'brains' for some time to come
 - Brain drain is a short-term loss, but long term gain if 'Brain Drained' PTs begin to give back to Africa!
 - They don't have to necessarily come back and stay

Africa needs Solution to 'Brain Drain'

- Advocating production of less minimally qualified PTs in order to keep them only for African consumption, is in the least, a very retrogressive thinking!

- Rather, give incentives so that well qualified African PTs can
 - Stay back in Africa
 - Come back home after some years outside Africa
 - Come back from time to time to give back

Africa needs Solution to 'Brain Drain'

- A shift in educational paradigm, injection of new and fresh ideas never tried before
 - Change can sometime be frightening
 - Change can be very challenging
 - But many times change is inevitable
 - The status-quo may attempt to stop or slow change!
 - But Change? We must change!

Need for a Paradigm Shift in PT Education Methods

- A way to combat effects of brain drain in Africa is to establish International long-distance education collaborations
- Shared educational resources and expertise
 - ▣ Within: Between African nations training schools
 - ▣ Without: Between African nations and training schools outside Africa

Need for a Paradigm Shift in PT Education Methods

- Long-Distance Education
 - Process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both
 - Honeyman and Miller (1993)
 - Has been used in education for centuries
 - Now revolutionalized by information technology

Need for a Paradigm Shift in PT Education Methods

- Traditional PT education method
 - ▣ Professors and students meet face-2-face in a physical facility

- Lon-Distance PT Education methods
 - ▣ Professors and students meet, but may be separated by distance and time

Need for a Paradigm Shift in PT Education Methods

- Long-Distance Education
 - ▣ Has been in use in Africa for continuing education programs
 - ▣ Hardly ever used for delivery of a whole professional curriculum content
 - Has never been used for delivery of Physiotherapy training curriculum
 - ▣ Professors and students meet, but may be separated by distance and time

Need for a Paradigm Shift in PT Education Methods

- Benefits of Long-Distance Education
 - ▣ It has potential in providing individualized attention and communication with students at a remote location or internationally
 - ▣ Professors compliments human resources at a remote location
 - ▣ Extensive educational resources can be made available to a remote location using information technology
 - ▣ Considerable reduction in cost of education
 - ▣ Access to education made easy!

Long-Distance Education Delivery Methods and Technologies

- Synchronous delivery
 - Online delivery of course content where all participants are "present" at the same time requiring a timetable to be organized

- Technology used for synchronous delivery
 - Web-based VoIP
 - Telephone
 - Videoconferencing
 - Web conferencing
 - Direct-broadcast satellite
 - Internet radio
 - Live streaming
 - Hologram (future LDE Technology)

Long-Distance Education Delivery Methods and Technologies

- Asynchronous delivery
 - ▣ Online delivery of course content where participants access course materials on their own schedule
 - ▣ Students are not required to be together at the same time

- Technologies for asynchronous delivery
 - ▣ Recorded audio or video
 - ▣ Message board forums
 - ▣ E-mail

Long-Distance Education Delivery Methods and Technologies for Africa

- For Africa what can work could be an hybrid of the mentioned LDE methods:
 - Synchronous
 - Asynchronous
 - International student and faculty exchange programs
 - Constant visitations to give back to Africa by
 - ‘Brain drained’ African physiotherapists

Case Studies: Long-Distance Education

- University of Kansas Medical Center
 - ▣ Delivery of a complete MPT Curriculum over the internet, live audio and video feeds to a remote rural location, Pittsburg, KS from Kansas City, KS
 - ▣ A distance of ~ 120 miles and 3 hours driving

- For Hands-on skills components
 - ▣ 2-3 Faculty on ground for all labs and clinicals

Case Studies: Long-Distance Education

- University of Phoenix, Arizona, USA
 - ▣ Delivery of complete Curriculum contents of virtually all and any course over the internet, live audio and video feeds to remote locations around the US
 - ▣ Undergraduate and Graduate courses can be completed 100% online


- Satellite locations in major cities available for face-2-face interactions where necessary or where portions of curriculum requires hands-on

Case Studies: Foreign Based Nigerian PTs Giving back

- International Continuing Education Network
 - Organizes post-entry level continuing education programs in Nigeria
 - Mr. Lukman Ganiyu



Proposals



Proposal for International
Collaborations between
USA and Nigerian PT programs:
A Nigerian Example

Nigerian PT Programs to Transit to DPT Entry Level Degrees

- The is a very strong clamour by Nigerian physiotherapists for Nigeria PT training programs to transit to Doctor of Physiotherapy (DPT) degree programs
- Excerpts from a proposal being presented to Nigerian PT Schools for International Long-Distance Collaboration highlighted here

Objectives of US-Nigeria PT Schools Collaborations

- The goals of these proposed collaborative efforts between Nigeria and US PT Programs include:
 - ▣ Empower Nigeria PT programs to make **successful** transition from BPT/BMR to DPT curriculum
 - ▣ Expose Nigeria PT students to international educational resources
 - ▣ Exposure of Nigerian PT Faculty (lecturers) to international perspectives in PT education
 - ▣ Initiate students and Faculty (lecturers) Exchange programs between Nigeria and US PT programs

Needs Assessment

- If we hypothetically assume a 2014 target date for Nigerian PT programs to transition to DPT
 - ▣ Need for Nigerian PT programs to upgrade curriculum
 - ▣ Need for international perspectives to Nigeria PT practice
 - ▣ Need to help Nigeria PT Faculty (Lecturers) upgrade and update their knowledge base
 - ▣ Learning from other PT programs around the world that have successfully transition to DPT
 - ▣ Need for other educational resources not readily available to Nigerian PT faculty (lecturers)

Collaboration Strategies Proposed

Option 1: Joint BMR/DPT Program

- Nigerian University award BMR/BPT after 5 years of entry level study
 - ▣ Nigerian program trains student for 5 years and award BMR/BPT
 - ▣ Students given option to proceed to 6th year if GPA adequate

- Foreign collaborator PT program provide t-DPT in the 6th year
 - ▣ Accepts BMR/BPT student into foreign TDPT program
 - ▣ Offered 100% online
 - ▣ Occasional International faculty visit to Nigerian PT program
 - ▣ DPT awarded by foreign collaborator PT program

Collaboration Strategies Proposed

Option 2: Nigerian DPT Program + Foreign Collaborator Input

- Nigerian University award DPT after 6 years of entry level study
 - Nigerian program trains student for 5 years
 - Students automatically proceed to terminal 6th year
 - Nigerian program awards DPT degree

- Foreign collaborator PT program provide DPT curriculum content
 - Offered 100% online
 - Occasional International faculty visit to Nigerian program
 - Takes very active part in terminal year
 - Administers all terminal examinations and test of competencies

Collaboration Strategies Proposed

Option 3: T-DPT Current Practicing PTs

- Current practicing PTs access to t-DPT program
 - ▣ Under Options 1 or 2

- Foreign collaborator PT program provide DPT curriculum content
 - ▣ Offered 100% online
 - ▣ Occasional International faculty visit to Nigerian program
 - ▣ Takes very active part in terminal year
 - ▣ Administers all terminal examinations and test of competencies

Collaboration Strategies Proposed

Option 4: Faculty Development -DHSc/DSc Program

- Faculty (lecturers) in Nigerian University PT program can only be sustained/retained long-term ONLY if
 - ▣ The PT program lecturers are groomed in-house (home-grown)
 - ▣ Therefore:
 - Lecturers with MSc can be enrolled in ONLINE DHSc/DSc degree program in a collaborating US PT program

- Foreign collaborator PT program provide long-distance Doctoral training for Nigeria PT program lecturers
 - ▣ Accepts MSc qualified lecturer to foreign DHSc/DSc program
 - ▣ Offered 100% online
 - ▣ Lecturer may visit the US PT program towards the last semester of the doctoral program for some hands-on training
 - ▣ Occasional International faculty visit to Nigerian program
 - ▣ DHSc/DSc awarded by foreign collaborator PT program
 - ▣ Nigeria University FULLY sponsors the tuition and fees

Responsibilities

- Commitment of participating Nigerian PT program
 - ▣ Provide infrastructure and conducive environment for long-distance learning
 - Smart classrooms
 - Internet connectivity
 - ▣ Financial responsibilities
 - Subsidize or fully sponsor students tuition and fees

- Provides secure atmosphere for examination
 - ▣ Ensures integrity of examination and tests
 - No exam malpractices
 - No shortcuts

- Foreign collaborator PT program commitment
 - ▣ Specially priced tuition and fees for services
 - ▣ Makes all their academic and some clinical resources available
 - ▣ Mentor Students and Nigerian faculty (lecturers)
 - ▣ Facilitates student and Faculty exchange programs

Collaboration Strategies Proposed

Some Suggestions

- If Option 1 is chosen
 - ▣ In the 1st year (2011), mandate t-DPT for all faculty (lecturers) irrespective of whether they have PhD or not
 - This is necessary so that lecturers can also participate in training their own DPT students in conjunction with the foreign PT program
 - ▣ In the 2nd (2012), 1st set of BMR students enrolled in the 6th TDPT program
 - ▣ In the 3rd and 4th Year (2013, 2014), 2nd and 3rd set of BMR students enrolled in the 6th TDPT program
 - ▣ Starting 2015, Option 1 is abandoned, and Option 2 continues until Nigerian University determines they can now stand on their own to train DPT students
 - By then, most faculty (lecturers) would have either completed their PhD here in Nigeria or the DHSc/DSc from the Collaborating US PT program

Collaboration Strategies Proposed

How do we finance this?

- University funds
- Education Trust Fund grants (?)
- Fund raising activities
- Contribution from students and their family (?)

Collaboration Strategies Proposed

How do we proceed?

- The Nigerian PT program determines the option(s) they want

- Dr. E.B. John on behalf of the Nigeria Physiotherapy Network commence preliminary negotiations with participating US PT programs

- Once Dr. John secures a tentative deal/agreement, then we will invite to the US PT program(s) for final negotiations and signing of contractual agreements
 - The Honourable Vice-Chancellor, the Provost, the Dean, the Head of Department and the Registrar OR the University's Legal Counsel
 - The Nigerian University team will be joined by: Dr. E. B. John and at least 1 Expert in Nigerian and US PT Higher Education: Suggesting Professors Chukuka Enwemeka/Joseph Balogun

Collaboration Strategies Proposed

How do we proceed?

- Nnamdi Azikiwe University already accepted this proposal in principle
- Bayero University, Kano very seriously considering the proposal
- Other Universities may follow choosing component(s) of the proposal that works best for them

Testimony of Long-Distance Education

- Nigerian physiotherapist, Mr. Samuel Olawuwo, based in Jos, Plateau State Nigeria recently completed a series of long-distance Education courses with the University of Illinois at Chicago and Governor's State University, Chicago
- Results from two of his independent studies on Occupational health is on display as a Poster presentation in this conference
- Let's hear his testimony

Conclusions

- African Physiotherapy training programs should very seriously consider
 - ▣ International Long-Distance Education cooperation between her Universities
 - ▣ International LDE co-operations with other nations outside Africa
 - ▣ We can probably find ways to overcome challenges of costs, infra-structure and attitudes towards change



Thank you!