

Developing Health Information Science (HIS) Curricula in Tanzania: Cooperation Between Health and Information Science Professionals

Haruna Hussein (PhD Candidate)

Dan Gerendasy (PhD)

Association for Health Information and Libraries in Africa (AHILA)
15th Congress in Makerere University, Kampala, Uganda

Introduction

- Health information and library services are essential for delivery of quality health services.
- As library and information science became more complex, specialisation was required.
- Now, most programs in library and information science include options to specialize in areas such as health information.

No LIS programs in Tanzania offer a specialisation in health information

- Poor understanding of biomedical terminologies
- Unfamiliarity with the workflow and culture of the clinic
- Poor understanding of customer needs

Purpose of the Study

Bring experts from multiple disciplines together in the areas of health and information, and assess their roles as they develop a hybrid curriculum

Co-design curriculum development

- Co-design “*a highly-facilitated, team-based process in which teachers, researchers, and developers work together in defined roles to design an educational innovation, realize the design in one or more prototypes, and evaluate each prototype’s significance for addressing a concrete educational need*” (Roschelle & Penuel, 2006)
- Curricula co-design has been shown to yield highest quality teaching and learning materials.
- Facilitates the development and implementation of multidisciplinary curricula

Methods

- Potential participants for the fields of health care and LIS had all been engaged in Ministry activities, although not necessarily together.
- 26 participants took part in the activity.
- Healthcare workers included nurses, medical doctors, environmental health scientists, pharmacists, and health records managers.
- LIS professionals came from health care and other settings (humanities departments, government offices and NGOs).

Methods

Participants were divided into three groups (NTA Level 4, 5 and 6). Each group was asked to:

- develop professional qualification standards (5 days)
- develop training curriculum (28 days)
- share curriculum with potential stakeholders (1 day)
- develop a job description and creation of a unique Health/LIS cadre for the health service scheme (5 days).

Methods

Data on their interactions was collected and analyzed using quantitative (SPSS) and qualitative methods (content analysis)

- daily evaluation forms
- team activities work
- presentations
- a daily recap,
- the ‘parking lot’
- facilitator meetings
- survey questionnaires with both closed and open ended questions.

Results: Develop qualification standards for a Diploma in the HIS

Basic Technician Certificate (NTA Level 4)

- Provide front desk support
- Maintain safety and security in health information environment
- Provide health information services
- Maintain legal and ethical principles in delivering services
- Demonstrate basic computer skills
- Maintain health records and information
- Use life support skills and self-management in provision of health information services
- Organize health information Materials

Technician Certificate (NTA Level 5)

- All NTA Level 4 qualification standards
- Maintain client relationships
- Develop and manage collection
- Use ICT in health information management
- Preserve and Conserve health information resources
- Communicate using biomedical terminologies

Ordinary Diploma (NTA Level 6)

- All NTA level 5 qualification standards
- Market Health Information Services
- Conduct operational research
- Manage Health information resource centre
- Organize health data
- Provide Training to clients

Basic Technician Certificate

Table 3: NTA Level 4 Modules

Semester 1		Semester 2	
SN	Module Title	SN	Module Title
1	Fundamentals of Communication Skills	1	Ethics and Professionalism in Health Information Provision
2	Basics of First Aid and Personal Protection	2	Cataloguing
3	Occupational Health and Safety	3	Classification
4	Basic Computer Application	4	Basics of Health Records
5	Personal Development Skills	5	Basics of Health Library Operations

Technician Certificate

NTA Level 5 Modules

Semester 1

Module Title

- Customer Care
- Biomedical Terminologies

- Application of ICT in Health Information Services
- Preservation and Conservation of Health Information Resources

Semester 2

Module Title

- Health Information System Design
- Application of Biomedical Terminologies in Health Information Services
- Collection Development

- Disaster Management
- Health Information Management
- Practical Field Training

Ordinary Diploma

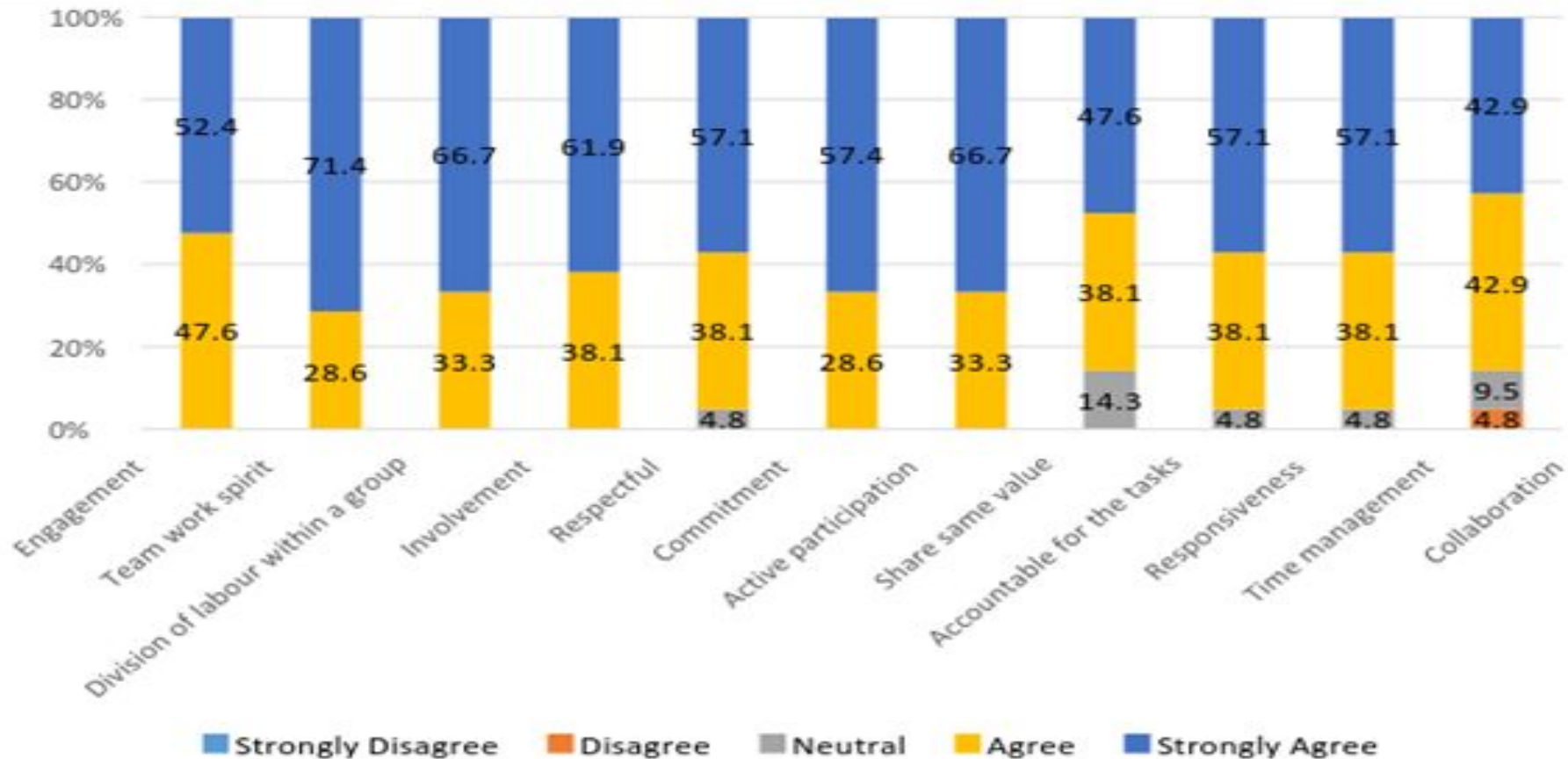
NTA Level 6 Modules

Semester 1		Semester 2	
SN	Module Title	SN	Module Title
1	Introduction to Leadership and Management	1	Quality Management
2	Marketing of Health Information Services	2	Teaching Methodology
3	Entrepreneurship	3	Health Information Literacy
4	Biostatistics	4	Statistical Applications in Data Analysis
5	Demography and Health Surveillance	5	Research
6	Project Management	6	Field Practical Training

Participants were asked to take a survey on the final day

Statement	Lowest (%)¹³	Low (%)	Medium (%)	High (%)	Highest (%)
• Suggesting new development features	0	4.8	9.5	33.3	52.4
• Recommending teaching requirements	0	9.5	4.8	52.4	33.3
• Providing feedback on design ideas and prototype	0	4.8	19	38.1	38.1
• Contribution to the documentation process	0	4.8	4.8	33.3	57.1
• Participation in discussions concerning technological implications and advancement	0	0	14.3	42.9	42.9
• Planning how to implement the curricula and technology	4.8	4.8	9.5	33.3	47.6
• Reflecting on the implementation of the curricula	0	4.8	19	33.3	42.9
• Reflecting on the curricula review	9.5	9.5	23.8	23.8	33.3
• Facilitating the curriculum design process	9.5	4.8	9.5	33.3	42.9

Distribution of views about co-design team participation



Health professional opinions about the newly developed HIS curriculum

- **Medical Specialist:** “It is a good programme that will answer and cater to the needs of community”.
- **Nurse Tutor:** “It is good curricula because it considers the Tanzanian context; therefore, I expect it will be implemented correctly since it is user friendly.”
- **Pharmacist:** “[It] will serve as a guiding tool in the provision of quality health information services”.
- **Medical Doctor:** “I think it is very important curricula that came at the right time”.
- **Health Record Officer:** “It is a good idea to have this cadre in our country, and this historical event to have such innovative efforts for our country and Africa in general”.

LIS professional opinions about the newly developed HIS curriculum

- **Librarian/Lecturer:** “It has come at the right time”.
- **Librarian/Lecturer:** “I think it will improve the provision of health information services to health professionals, as well as the community at large”.
- **LIS Professor:** “The HIS curricula if well implemented is likely to generate very well informed health information professionals to work in the health sector”.
- **Librarian:** “This newly developed HIS curricula needs to be reviewed after a period of time in order to accommodate new developments in the fields of health and information science”.
- **Librarian/Lecturer:** “These curricula are well designed and comprehensive, and can cater to the needs of information professionals in the health discipline.
- **Librarian/Lecturer:** “Considering the demands of health information, these curricula are sufficient and efficient for the Tanzanian context”.

Conclusion

- Health professionals have included their needs in this curricula.
- LIS field have input their technical requirements as well.
- The health professionals new next to nothing about LIS
- Likewise, the LIS professionals new very little about the Health professions
- During the process, they grew too truly appreciate and respect each others professionalism and expertise
- By the end all were very enthusiastic about the curriculum and eager to implement it.

Future Work

- The curricula have been approved by NACTE
- Our future plans are to:
 - develop job descriptions and career paths (done);
 - develop teaching and learning content;
 - conduct a 3-month curriculum pilot program;
 - implement the HIS program.

The End

Thank You for Listening