TRANSFORMING BANGLADESH’S HEALTH WORKFORCE FOR SUSTAINABLE HEALTH IMPACT
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ABOUT THE Trans4m-PH PROJECT

The Trans4m-PH Project (Transformative Competency-Based Public Health Education for Professional Employability in Bangladesh’s Health Sector) was launched in January 2019. The National Partners (EU Project Country/Bangladeshi Institutions) are the pioneering tripartite institutional partnership between BRAC James P Grant School of Public Health (BRAC JPGSPH), BRAC University; Asian University for Women (AUW); and Independent University, Bangladesh (IUB). The Technical Partners (comprised of EU Partner Country Institutions) are Maastricht University, the Netherlands; and Institute of Development Studies, University of Sussex, UK.

Chronic high-skilled workforce shortages in Bangladesh’s Public Health Sector are a formidable constraint to the nation’s sustainable human development. Primarily stemming from their Public Health programmes, HEI are unable to meet the priority skill demands of the sector’s NGOs, government agencies, multilateral partners and other stakeholders. The academic learning model coupled with the faculty teaching capacities, cannot equip graduates for the real-world professional skill sets to constructively engage community Public Health needs.

Trans4m-PH Project devised a multi-faceted framework to achieve the desired education outcomes for our valued students and future health workforce. This model systematically redesigned around the student learner’s competency development by introducing the following four interdependent components in the academic learning endeavor. It is only by integratively designing these core features of Competency-based Curriculum, Competency-based Learning Methodologies, Competency-based Faculty Development and Professional Competency Training into a sustainable Learning ecosystem that Trans4-PH Project has more fully realized our students’ innate potential and contributions to the Public Health sector.

The project partners devised holistic learning ecosystems to facilitate students’ skill-learning outcomes for future health workforce impact. The project’s innovative ‘start-up’ approach allowed faculty to learn cutting-edge Skill-based Curriculum Design and Teaching, which is now being scaled-up in all three universities through the establishment of the Health-Learning Innovation Labs.

The Project was designed by Mikhail I. Islam, Learning Designer, Learning Design Studio, who also worked as lead designer with the Management Team: Tahsin Madani Hossain (Coordinator), Selima Sara Kabir & Adrita Rahman (Project Managers) at BRAC JPGSPH, to implement this tripartite partnership curriculum reform.

The project was funded by the European Union.
FOUR INTERDEPENDENT COMPONENTS IN THE ACADEMIC LEARNING ENDEAVOR ARE AS FOLLOWS:

- PUBLIC HEALTH COMPETENCY-BASED CURRICULUM
- PUBLIC HEALTH LEARNING METHODOLOGIES
- FACULTY PROFESSIONAL SKILLS TRAINING
- FACULTY FACILITATOR DEVELOPMENT
CURRICULUM DESIGN PROCESS

--- STEP-01

THE DNA
The process helps create the team's initial checklist of what this course needs (in terms of skills, content and methods) in order to be more competency based and student oriented.

It shows the team two things - what doesn't work for your course and what needs to be added to the course.

--- STEP-02

THE WORKSHOP
The teams sit face to face with their mentors and brainstorm how they will achieve all the things they have listed as needs of the course in there DNA.

--- STEP-03

THE BRAINSTORMING
After the team gathers wisdom from their mentors, they have to sit together and think about how the skills, content, methods of learning and assessment will all come together. This is where they will learn about 'constructive alignment'.

--- STEP-04

THE DRAFTING
Then comes structuring bit of it. The team has to now produce their deliverable. This is where it becomes a cyclical process. It usually goes - write up, show your mentors, get feedback revise and repeat.

--- STEP-05

THE DELIVERABLES
Once the team's receive a feedback from the mentors along the lines of “This looks like the best version so far”-it is time to wrap up! But not so fast. Don't forget that these are living documents, there will always be changes. Even when you are in the middle of implementing the course.
COMPONENTS AND DELIVERABLES

COMPONENT 1:
PUBLIC HEALTH COMPETENCY BASED CURRICULUM

The three national partner institutions have undertaken steps to improve student’s learning experiences prior to the Trans4m-PH project, with BRACSPH piloting competency-based courses and conducting Employer Demand Assessments; AUW’s Center for Teaching & Scholarship; and ICCCAD- IUB’s faculty initiatives. These steps validated the need for best-practice curriculum and the Competency-based learning imperative for Bangladesh. However, adopting this approach requires students to simulate and practice real-world workforce skills. This is achieved by centering its learning praxis on students and employers’ skill needs to ensure graduates’ public health workforce readiness.

COMPONENT 2:
PUBLIC HEALTH LEARNING METHODOLOGIES

The Curriculum reformed through Component #1 requires practical, real-world learning methodologies to develop the appropriate Transformative Competency-Based Public Health Education for Professional Employability in Bangladesh’s Health Sector/TRANS4M-PH competencies for respective public health fields. Learners must immerse themselves in community-based environments to develop critical thinking, knowledge and understanding. This integral need for appropriate Public Health pedagogy requires formative steps of learning methodological design through a group of priority courses while concurrently developing local faculty capabilities.
COMPONENT 1: PUBLIC HEALTH COMPETENCY BASED CURRICULUM
COMPONENT 2: PUBLIC HEALTH LEARNING METHODOLOGIES

- REFORMED COURSE MATERIALS
- COURSE SYLLABUS
- LEARNER’S SKILLS ASSESSMENT FORM
- COURSE LEARNER’S MANUAL
- COURSE LOGISTICS PLAN
- PEER EVALUATION FORM
- COURSE DAILY SESSIONS
- CURRICULUM DESIGNER MANUAL
- COURSE EVALUATION FORM
DELIVERABLES

**COURSE SYLLABUS:**
This will contain a list of session content as well as learning and skill outcomes for the curriculum.

**COURSE GUIDE:**
This will contain a day-by-day breakdown of the course curriculum (including the syllabus and daily field schedule), as well as the learning methodologies for each session, intended for the facilitator.

**LEARNER COURSE GUIDE:**
This will contain a day-by-day breakdown of the course curriculum (it is the breakdown of the syllabus and daily field schedule) intended for the students.

**COURSE LOGISTIC GUIDE:**
This will be a guideline for the planning and implementation of fieldwork, including contact details for local guides during fieldwork, car procurement, and other logistical details.
DELIVERABLES

**LEARNER COURSE EVALUATION:**
A form containing the assessment rubric for the reformed course, to be filled out by student or learner.

**COURSE PEER EVALUATION:**
A form containing the assessment rubric for each student or learner, to be filled out by learners in the same groups as them during group or pair work.

**LEARNER SKILL ASSESSMENT:**
A form containing the assessment rubric for each student or learner, to be filled out by the instructor.

**REDESIGNED COURSE PRESENTATION:**
This will contain specific session content (presentations, videos, etc) that will be presented in the classrooms to the students.

**CURRICULUM DESIGNER GUIDE:**
This will be a documentation of the complete process of how the reformed curriculum was developed.
COMPONENT 3: FACULTY FACILITATOR DEVELOPMENT

The success of this Competency-based Curriculum system rests with the faculty, who must conceptualize, manage, and improvise their courses to ensure concrete competency outcomes. It is now self-evident that effective teachers are the critical factor for ensuring learning outcomes. However, Public Health Faculty must be held accountable or assessed accordingly. Given that current teaching is mismatched with real-world public health competency demands, it is critical that our Public Health Faculty cultivate their passion for teaching with the appropriate practical knowledge, field experience and creativity to train future public health professionals. Faculty capacity will be upskilled and grounded in Developing Country Public Health needs. Traditional faculty-centric teaching will thereby transition to learner-centric teaching, focusing on the learner’s priorities, real-world professional needs, and skills development.

COMPONENT 4: PUBLIC HEALTH COMPETENCY-BASED CURRICULUM

To initiate the process of indigenizing this extensive educational know-how and practice, the 3 partners will collate the Three Curriculum components’ design and practical learnings, into structured, formalized Faculty Professional Skills Development Training modules. This enables knowledge and practice continuity, institutional memory and a self-generating cycle of Faculty capacity building. This will institutionalize the complete Competency-Based Curriculum system and enable the participating Faculty to become competent local resources for their entire Faculty to access the project’s Curriculum Design learning, practice, and professional improvement. Given that there is no quality, international-standard Faculty training resources readily available in Bangladesh; these Competency-based Professional Trainings will pioneer a more rigorous self, peer, student and performance assessment system to develop teaching accountability and continual quality improvement.
COMPONENT 3: FACULTY FACILITATOR DEVELOPMENT &

COMPONENT 4: PUBLIC HEALTH COMPETENCY-BASED CURRICULUM

- FACULTY COURSE MANUAL
- FACULTY DEVELOPMENT GUIDE
- FACULTY SKILLS ASSESSMENT FORM
- PROFESSIONAL SKILLS TRAINING ONLINE MODULES
- VIRTUAL TEACHING & E-LEARNING HUB
DEVELOPABLES

**FACULTY COURSE TEACHING GUIDE:**
This will contain a complete breakdown of the teaching methodologies employed per session within the course. It will articulate how each session will be taught, intended for the facilitator.

**FACULTY FACILITATOR DEVELOPMENT GUIDE:**
There are certain universal facilitation tools that other faculties can benefit from; effective facilitation for anyone to borrow into their respective course. How to become an effective faculty-facilitator. Facilitation means the process is more learner-focused.

**FACULTY COMPETENCY ASSESSMENT:**
A form containing the assessment rubric for each faculty, to be filled out by the institute.

**PROFESSIONAL SKILLS TRAINING ONLINE MODULES:**
The Professional Skills Training Online Modules are short virtual modules on Competency-based Curricula, Curricula Design and Learning Methodologies developed for faculty capacity building.

**VIRTUAL TEACHING AND E-LEARNING HUB:**
The resource materials generated by UM, IDS during trainings will be used to set up a virtual Teaching & e-Learning Hub. Within the Hub, there will be an e-learning Platform which will archive short Professional Skills Training Online Modules for faculty capacity building in future.
QUALITY ASSURANCE (QA)

The Steering Committee is composed of one representative from each partner institution. As a committee member, they will be tasked with evaluating all courses and materials produced by their respective institution and approving final versions of all reports. A feedback loop will be integrated to ensure project objectives are met.

The Steering Committee will also be responsible for all conflict resolutions and in case of a conflict, the issue will be discussed with the involved parties for an amicable solution. Openness and transparency will be ensured by the Committee throughout the project period.

This outlines the different actors who were involved in ensuring the quality of the project.
PROJECT OUTCOMES

9
Competency based Public Health Course Curriculum for Local Partners

36
Local Faculty and Curriculum Designers

9
Faculty Development Skills Training Modules

3
Institutional Learning Methodology Archives

3
Institutional Curriculum-Based archives

1
Virtual Teaching and E-Learning Platform
EXPERIENCE SHARING

TRANSFORMATIVE COMPETENCY-BASED PUBLIC HEALTH EDUCATION FOR PROFESSIONAL EMPLOYABILITY IN BANGLADESH’S HEALTH SECTOR (Trans4m-PH)
TRANSFORMATIVE COMPETENCY-BASED PUBLIC HEALTH EDUCATION FOR PROFESSIONAL EMPLOYABILITY IN BANGLADESH’S HEALTH SECTOR (Trans4m-PH)

by Prof. A.K.M Moniruzzaman Mollah, Prof. Sayed Mohammad Nazim Uddin & Nema Marjana, Asian University of Women (AUW)

In December 2018, Asian University for Women (AUW), ICCCAD Independent University of Bangladesh (IUB) and BRAC James P Grant School of Public Health (JPGSPH) were jointly awarded the prestigious European Union 2018 Erasmus+ “Capacity Building in Higher Education” Grant. BRAC JPGSPH is the lead institution while the technical partners are University of Maastricht (UM), Netherlands and Institute of Development Studies (IDS), University of Sussex, UK. The technical partners act as mentors due to their experience and knowledgeable background. UM has experience in student centered competency-based curriculum whereas IDS is known for their innovative teaching and learning strategies. Both partners bring in an extensive global health network.

This project aims to transform already existing public health curricula into a student centered and competency-based curricula. By redesigning the curricula, students can develop the necessary skills and specific knowledge needed to perform the workforce demands, pursue higher education or conduct much needed health related research in Bangladesh. This will not only help develop students’ skills but will also help fill the workforce gap in Bangladesh, bring awareness of public health issues among the population and adopt an effective work model into the public health professional field.

Asian University for Women (AUW) began its journey in 2019 and has successfully completed transforming three courses offered to students: Infectious Disease (2019), Nutrigenetics (2020) and Environmental Health (2021) through a rigorous process with the help of UM and IDS mentors. With an increasing trend in the number of disease outbreaks worldwide, there is an urgency to train the next generation to find new standards of care for the treatment of infectious
disease. Hence, AUW selected Infectious Disease course in Year 1 for transformation as a competency-based learning outcome oriented under this project. In Year 2, AUW offered Nutrigenetics, a relatively new field of science involving multidisciplinary areas such as human genetics, health and nutrition. This field holds many potentials for providing personalized nutritional advice and treatment to the general public both at population and individual levels based on their genetic makeup. In its final year of the project, AUW selected an environmental health course as it deals with the relationship between the people and the environment. This broad topic has become an important public health field due to its increasing impact on the growing population and the environment we live in.

The faculty and staff selected to take part in this project initiates the beginning of the year through an orientation from consultants. This is followed by mentorship by the UM team covering two project components and then a handover to IDS mentors for the remaining two project components. In 2019, the project held workshops both in Dhaka, Bangladesh and Maastricht, Netherlands to help facilitate the course development. In 2020, AUW went fully online due to COVID-19. We proceeded with the project by having weekly online zoom meetings with the mentors. Although the experience was different, it is a learning experience for us all.

It has been an enjoyable experience so far! The orientation, the weekly UM mentor session, the discussions on the topics, teaching methodology, curricula design and examples of innovative classroom activities has been a wonderful experience to share across the borders. Universities in Bangladesh usually adopt a traditional method of teaching where faculty teaches students’ content-based curriculum with little participation from students. AUW, the first women Liberal Arts and Science University in Bangladesh, has a diverse background of student body of all socioeconomic backgrounds and therefore teaching methodology can become a challenge. Hence, this project has been a tremendously helpful resource for our faculties and students. The project is helped by introducing the concept of storytelling within the course syllabus. This was appealing because students are empowered to advance based on their ability to master skills at their own pace. It allows flexibility, adaptability, and meaningful practicality in the teaching practice.

The AUW team had weekly meetings with the UM mentors to draft the objectives and expected outcomes of the course. We spent extensive time discussing and outlined how to describe the course. The aim of re-writing the course description is to give students comprehensive information on the goals and objectives of the course, the assessment methods, the skill set and outcome expected and most importantly their possible future plan. This allows students to make an
informed decision whether the course is beneficial for them. To make the syllabus visually appealing to the reader i.e., students, we used flow charts and color coding to depict the objectives/skill sets and lesson plans. This helps to minimize confusion and make it interesting.

During our workshops, we introduce the courses to students who have adapted well to the changes in the structure and activities. For example, one of the student-centered activities we have modified and applied in Year 3 is the STL [small-to-large] group discussion where students are grouped and given prepared materials for discussion. Student group then selects a representative to discuss their topic to the rest of the class. Through this activity, students have shown greater participation and developing skills in communication and analysis. We found this beneficial as students will actively apply critical thinking and problem-solving skills in fast-paced, diverse workplaces. Students will develop skills and knowledge that helps them in future endeavors.

Overall, we find that it is important to have personalized interaction with students as it helps them to grow, develop and learn the skills and knowledge needed to connect to their future pursuits. The hope is that after graduation, students will be equipped to tackle real life issues and challenges with the skills they have learned through the public health courses. Bangladesh is facing multiple challenges within the health sector including shortage of health trained workforce, weak management, lack of regulation, etc. However, one of the recent successes Bangladesh has achieved is an increase in the number of health graduates and health worker training facilities. This project has contributed to that success by training students through transformed student centric and competency based public health courses.
EXPERIENCE SHARING

HOW A SKILLS-BASED APPROACH HELPED IN TEACHING ANTHROPOLOGY
HOW A SKILLS-BASED APPROACH HELPED IN TEACHING ANTHROPOLOGY

by Ishrat Jahan, BRAC JGSPH, BRAC University

Teaching a course feels like a daunting task no matter how many times one has been through it. From a distance, teaching seems to be a practiced set of methods and materials, learning is done through a series of lectures, question and answer sessions and exams. But when one is in the midst of it, the reality is much different. Teaching, and teaching effectively, requires a faculty to always be alert to a host of things: the relevance and currency of course materials, the new layers of research and materials that are always being generated and checking how students respond to certain teaching methods and its associated content.

Teaching effectively thus requires a sense of fluidity, the moment a course is treated as a practiced set of methods and materials, it risks becoming cut off from on the ground context of the very issues that students would be dealing with as future professionals.

In the process of teaching a master’s programme batch, it is crucial to be able to create an open classroom environment. Especially when the classroom is composed mostly of adult students, many of whom have years of professional experience. But implementing interactive teaching methods to achieve this can be difficult since in the context of Bangladesh traditional teaching methods mostly involve didactic/ instructive lecture-based approaches. Hence in the process of trying to create open and interactive classrooms, there is a struggle to find the space and time to ask faculties to rethink how they approach their teaching.

In light of this, the Transformative Competency-Based Public Health Education for Professional Employability in Bangladesh’s Health Sector (Trans4m-PH) project provided the faculty/teaching team of Anthropological Approaches to Public Health a space to rethink how the curriculum aligned to the values and skills the course sought to impart to students. Curriculum choices are made based on what disciplines and professions value, what academic departments and / or individual faculty decide would add value and believe to be useful for students to learn and know.

In a complex and fast changing world, curricula need to pay attention to whether the teaching and learning processes are to contribute to the cultivation of graduates who understand and can operate in both local and global contexts, then curriculum content and processes need to reflect this. Hence, the project advocated for a rethinking of whether our current approaches provide the kind of skills-based learning classroom environments where independence, thinking skills, collaboration and active learning are developed at the same time as knowledge is acquired.
A little background about the course in question - The MPH 512 module titled – Anthropological Approaches to Public Health is the second module of the one-year master’s program at BRAC JPGSPH. The course was intended to build up student’s ideas on concepts such as – medical pluralism, individual and community’s perceptions of health, etc. for them to be able to use these understandings or ideologies of health and health experiences when learning about qualitative methods of researching on public health issues.

Over the years the module has been rethought and redeveloped in order to best align with the intended outcomes of the course and the changing priorities of which aspects of anthropology students in a public health Master’s program would require in the long run. A challenge we identified early during this project was that the disciple of anthropology has always been approached in a manner that is didactic because a lot of the content usually taught in the classroom is theoretical. This challenge was possible to overcome through redesign but what was crucial before we could undergo that process was to rethink our mindset and how we thought about teaching anthropology when immersed in the classroom.

At the start of the project, the team held a series of design consultation meetings that helped us to rethink our mindset and interna biases regarding the anthropology curriculum by asking a key question repeatedly: - What are the kinds of skill outcomes we sought to impart to students? How would those said outcomes become applicable in real life public health work with communities? These questions were central to our year-long work because we did not simply want to impart theoretical knowledge, but rather a mixture of skills and knowledge that students will carry forward both in their master’s program and their future work.

With a set of skills outcomes found, the team decided on following a learning by doing approach to the curriculum. Following that line of thought, the learning module took on a solutions centric approach, seeking to impart the skill
set – this was done by basing the 8-day session on a solutions project. The methodologies were broken down into detailed steps in the daily sessions to ensure complete visibility for the facilitator conducting the course sessions. This process was followed meticulously after every remote coaching and a new draft was submitted to the University of Maastricht mentors for review.

The learning methods we sought to develop are based on a specific ideology that the teacher student relationship and the learning environment in the classroom and in future, for the entire master’s course is an interactive relationship. The most exciting example of this comes straight from our 2020 classroom. We sought to begin the first session on the first day by sharing with our students how we envisioned our experience of a transformed public health module/classroom. The students were welcomed firstly with a changed layout of the classroom. Instead of having the usual, structured layout of rows of individual chairs for the students and a large desk in the front of the board for the teacher, we adopted a workshop style layout. This helped build stronger bonds among students in their groups and made it easier to have conversations. The first session of the day included a case study on the social determinants of health where students were taken through a story of a mother and her newborn’s battle with tetanus infection. The students were asked to point out the kinds of barriers the new mother might have faced when trying to seek healthcare for her child. The students, split into groups, came up with their lists of social determinants and explanations for them, sharing with each other. This exercise reflected that the classroom was meant to be an equal and proactive environment. It also helped set the tone for the rest of the module - the social determinants discussed were a recurring theme in the module. It was a convenient touchstone for both the faculty and students to refer back to and was used as an example to help break down more complex concepts.

Taking on this approach means focusing on the form of content in the classroom which will have concrete value as applied knowledge in the future for these public health professionals and adds value to a student’s skill development for this specific course. We wanted to create a “community of practice” inside the classroom, where we inquire together into the theory and practice of public health anthropology, support and contribute to each other’s learning and understanding in order to generate knowledge collectively. We don’t want to “deliver content” but to open a space that will strengthen our capacity for inquiry and perhaps, our understanding of and commitment to change and development.

Once we implemented the course, the difference was visible compared to our previous cohorts. Within the space of the classroom, we were all learners, a certain distance between the faculty and classroom has seemed to be diminished; through interactive approaches it created various pockets of opportunity over the duration of the project to share our experiences and knowledge, to challenge each other’s ways of thinking and making sense, to produce and represent knowledge in different, eye-opening ways - both for faculty and students alike.
EXPERIENCE SHARING

THE PROCESS OF REFORMING THE INTRODUCTION TO PUBLIC HEALTH CURRICULUM
THE PROCESS OF REFORMING THE INTRODUCTION TO PUBLIC HEALTH CURRICULUM

by Proloy Barua, BRAC JGPSPH, BRAC University

In this reflection, I am going to share my learning experience from the Trans4m-PH Project during last six month since January 2021 while I have participated in reforming the Introduction to Public Health (hereafter, Intro to PH) curriculum for MPH Program at Games P Grant School of Public Health (JGPSPH), BRAC University. In the Trans4m-PH Project, there are four major independent components: (i) Public Health Competency-based Curriculum, (ii) Public Health Learning Methodologies, (iii) Faculty Facilitator Development, (iv) Faculty Professional Skills Training, for reforming the Intro to PH curriculum. Between January 18 and June 14, 2021, we were taught the first two components. So, I am going to share my learning experience from the first two components in which I will mainly focus on my learning experience on the reforming process of the Intro to PH curriculum.

Interactive remote coaching

After a thorough orientation on the Trans4m-PH project in January 2021, I have participated in a series of remote training and/discussion sessions which were the main ingredients that helped enhance my knowledge and experience on a new topic like reforming a curriculum. These are: (a) weekly meeting with course Design Consultant: Mikhail Islam, (b) weekly meeting with technical or academic or technical partner (Maastricht University), (c) weekly internal meeting with JGPSPH Team Members: Adepto Intisar Ahmed, Nibedita Sarkar, and Proloy Barua, and (d) regular meetings with BRAC JGPSPH ERASMUS+ Team: Tahsin Madani Hossain, Adrita Rahman, Selima Sara Kabir. Now, I briefly discuss the process that we followed to reform the Intro to PH curriculum in the following sections.

Principles of reforming curriculum

At the very first day the Design Consultant, named Mikhail Islam, gave us general overview on reforming the Intro to PH curriculum. Most importantly, he explained the fundamental/principles of the designing Intro to PH course, how it was designed initially and so on that actually laid the foundation of reforming Intro to PH curriculum. So far, I remember, the redesigned curriculum should be: transformative, competency-based, developing country oriented, prioritize developing country public health problem such as child nutrition, maternal, neonatal, and child health (MNCH), health problem of adolescent girls and boys, explicitly community centric solutions by prioritizing community preferences, ensuring better health outcomes through understanding community health context during immersive fieldwork. The curriculum should also focus on more gender equitable frugal solutions of complex health issues of the vulnerable community people in the developing world, especially in sub-Saharan Africa (SSA), south and south-east Asia, and Latin America. To reiterate, the reformed course will be experiential learning oriented. So, there
will be more field work (e.g., urban slum visits) at the very beginning of the course instead of many lectures in the classroom. Finally, the reformed curriculum will promote community centric public health solutions in developing country context instead of developed country context. It is important to note here that initially the curriculum was based on health problems in developed countries.

**Instruction for populating a DNA Form**

We have used a DNA Form template for reforming Intro to PH curriculum. This DNA form included four basic pillars of course curriculum such as (i) skills learning outcomes, (ii) learning content, (iii) learning sub-content, and (iv) learning methodologies. The Design Consultant gave advice and instruction to JPGSPH Team Members regarding the process to fill in the DNA form. For instance, we were supposed to copy all four components: skills, contents, sub-contents, learning methodologies from the “2017 Intro to PH Syllabus”. This means we actually reformed the 2017 curriculum. In addition, we were instructed to review the 2021 Intro to PH Syllabus and bring relevant contents to fill the DNA form. We were hardly allowed to add any new skills and contents but rearrange or simplify them. Because, the Design Consultant instructed us to provide good reasons for adding any new skills into existing documents.

**Populating the DNA Form**

As instructed, I along with other team members copied all relevant components mostly from the 2017 Syllabus and filled in DNA form. For instance, we juxtaposed all skills, session contents, corresponding sub-contents from Day-1 to Day-11. It is important to note here that the duration of the Intro to PH course is only two weeks. We followed the “Intro to PH course daily Guide” developed in 2017 and 2021 to fill in DNA form with corresponding learning methodologies of each session. Additionally, Teaching Fellows (TFs) of previous years gave their valuable inputs to explain learning methodologies. We also applied our own experience to elaborate learning methodologies in consultation with Design Consultant. To progress with the DNA Form appropriately, we followed a collaborative working process between JPGSPH Team Members, Design Consultant, and Academic/Technical Partner. Figure-1 illustrates a typical working process between teams to reform the Intro to PH curriculum which is pretty much self-explanatory.

**Collaboration within JPGSPH Team Members**

Following instructions of the Design Consultant, Team Members virtually meet every Sunday to solve assigned tasks by sharing the responsibilities. The team members are supposed to complete their assigned tasks individually before Sunday's meeting and then update each other in the group meeting. Team members need to do some brainstorming
to solve some assigned tasks together. For instance, our first assignment given by the Design Consultant was to brainstorm and prepare a few bullet points on these three questions: (a) why is this course essential in relation to /for the given community? (b) why is this course essential for students who want to professionally work with the community? (c) what are the professional skills students will develop in course to apply to improve the community (via the course)? Thus, the Team used to prepare a draft document (say Draft_0) to be submitted to the Design Consultant before the Weekly Meeting through Project Manager: Adrita Rahman.

Figure 1: Graphical Illustration of a typical working process between teams to reform the Intro to PH curriculum
Collaboration between JPGSPH Team and Design Consultant

The JPGSPH Team Members used to meet the Design Consultant every Wednesday with prior appointment to discuss the draft document (say Draft_0 or Draft_1). The duration of this meeting is ninety minutes. In this meeting, the Design Consultant reviews the draft course contents and gives comments and suggestions. Thus, a draft document is updated from zero draft (Draft_0) to draft one (Draft_1). The Team usually gets feedback and clarifications on draft documents to proceed with draft documents. The Team also has the privilege to discuss any unsolved issues in the internal team meeting from the previous week. The Team also discusses any feedback from Technical Partner (UM) on the draft document with the Design Consultant. It should be mentioned here that the JPGSPH Team usually spends more time with Design Consultant than Academic Partner (UM). Because it takes some more time (say 2-3 weeks) to prepare a draft document to be shared with the UM. So, sometimes we have to postpone a pre-scheduled meeting if the document is not ready to share with the UM.

Figure 2: Word clouds showing key words used in the reformed curriculum

Collaboration between JPGSPH Team and Technical Partner (Maastricht University or UM)

The JPGSPH Team Members used to meet the UM Team every Monday for an interactive remote coaching. Typically, we used to start the meeting by updating each other and sometimes we used to present our work. The UM Team Members: Anja Krumeich, Esther Jurgens, used to review our draft document and give critical feedback on draft course contents. Their mentorship guided the JPGSPH Team to proceed with reforming the Intro to PH curriculum. For instance, the UM Team reviewed our draft DNA form and added a few more new skills (e.g., conceptual skill, collaborative skill) into the document. This process will be continued until the Intro to PH curriculum is reformed.
EXPERIENCE SHARING

REFORMING THE GENDER, SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS MODULE
REFORMING THE GENDER, SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS MODULE

By Wafa Alam, BRAC JPGSPH, BRAC University

Back in 2020, the module titled Gender, Sexual and Reproductive Health and Rights (MPH 660) was chosen to be reformed in the second year of the Transformative Competency-Based Public Health Education for Professional Employability in Bangladesh’s Health Sector (Trans4m-PH) project. This module is taught towards the end of the one-year master’s program at BRAC JPGSPH. It aims to provide students with a broad perspective on sexual and reproductive health and rights (SRHR) life cycle of adolescents and women and acquire a layered understanding of the larger factors that shape their lives, their sexual and reproductive health, emotional and mental well-being; it allows students to understand specific SRHR issues from the lens of the community.

As a team, one of our initial struggles was to understand what was really meant by the term ‘competency-based curriculum’ and to draw a line between what was important for students/learners to know versus what was important for them to be able to do when they become public health professionals. The teaching team initially thought of every new content possible that could be included in the redesign process. However, initially we were not able to frame our thinking as facilitators and really put students/learners at the center of the curriculum.

That is where mentors from Year 1 of the project came in and suggested that we think backwards from what skills we think students/learners would need by the end of the module and then decide the content for the course. Again, it was not easy thinking about skills we want students to acquire without really knowing what we would be teaching them; we ended up with a long list of skills. At this point, we were advised by the design consultant to do some brainstorming. When we came up with the answers to these questions, it helped guide the team through the curriculum design process and helped us to determine our overarching philosophy for the course.

Some of the questions that helped guide our thinking are as follows:

• Why is the course essential for public health professionals?
• What do you hope the students will take away from the course?
• Which part of the course is fundamental and necessary?
• Why is Gender and SRHR essential in a community and how does it translate to community well-being?

With a tentative list of skills, we started working on our course daily session which laid out the skill outcomes, session content and sub-content, learning methodologies and assessment methods. Besides this, we had countless other documents to work on such as the course syllabus, learner’s manual, assessment, and evaluation forms and so on.
We were quite overwhelmed and at one point, especially when we started working on multiple documents together. However, we soon realized that each remote coaching session with the University of Maastricht meant some critical feedback from mentors to guide us and having to submit a draft. Working on multiple documents at the same time also meant that the same feedback had to be incorporated into multiple documents, which at times got a bit challenging.

We then figured that it would be best to work off one master document, have that finalized and then feed the information into other documents as required. This made the process a lot easier, and all other deliverables gradually came into shape with little modifications.

At this point, we had our course planned out along with the draft of the basic methodologies to be used for the sessions. The next step in the process was fleshing out the methodologies and preparing reformed course materials and conducting mock sessions with IDS mentors. These mock sessions helped us identify what worked and what did not in our initial session plans. It helped us better understand how particular contents needed to be taught in class, so it is easier for students. Through these mock sessions, we also learned how we can provide effective feedback to the students. These sessions also helped improve our facilitation skills greatly. Sometimes, after a mock session, we also had to consider making necessary changes to sub-content and methodology used to further refine them.

One of my major takeaways from the Trans4m PH project is that curriculum design is an iterative process. It is important to understand that when designing curriculum, we need to go through a trial-and-error method/process of constant refining to finally reach the point that we had envisioned. It is important to be flexible. For instance, you may start planning a session in a particular way, and you start putting things down – starting with what skills you think students may develop, then content and followed by methodology to be used.
Experience Sharing

Trans4m-PH Experience Through The Eye of a Former Student and Teaching Fellow
Trans4m-PH EXPERIENCE THROUGH THE EYE OF A FORMER STUDENT AND TEACHING FELLOW

By Nibedita Sarkar, BRAC JGPSPH, BRAC University

As a former student of the MPH programme at BRAC James P Grant School of Public Health and my current work as a teaching fellow for several courses of the MPH programme, I managed to have an idea about most of the course designs, including their strengths and limitations. I also knew where the students struggle the most with the courses. When I was selected as a trainee for the Trans4m-PH project for Year-3, we redesigned the very first course of the MPH Programme titled “Introduction to Public Health” which was later named as “Re-Imagining Public Health for the Developing World”.

During this time, I got the chance to share ideas to redesign the course that I gathered over the past few years working as Research Associate and a Teaching Fellow at BRACJGPSPH. We were a team of three, along with the Learning Designer, each bringing their own expertise in the redesign process. However, the process was not as smooth or as easy as it sounds. As none of us, the trainees, had prior experience in redesigning any masters level course, it took hours after hours to brainstorm new methodologies, to modify the existing ones, to come up with some relevant ideas, and change that again to finally redesign many of the previous methodologies with more student engaging approaches. Throughout this journey, we got mentoRight after the training, I had the opportunity to facilitate two sessions in the Introduction to Public Health Course that has been renamed as Re-Imagining Public Health for Developing World module of this year’s MPH programme with one of my colleagues who was also a trainee of Trans4m-PH project with me. We designed the sessions in a way so that the students get the opportunity to express their thoughts and opinions to ensure peer learning. Of course, we guided and facilitated but students also played a major role in each of the sessions. The response from the students and the faculties was good. I must admit that it
was not possible for us to design and facilitate such sessions in this student-friendly way if we were not trained by the Trans4m-PH project. The project not only taught us different teaching methodologies but also made us confident to engage with the students while conducting any session. So, it was one of the best opportunities we received from the school which will definitely help us in our career paths.

rship, and very clear guidance from our design consultant, external and internal mentors, and in house experts. We have learnt a lot throughout the process. We have learnt the importance of ensuring students’ engagement using innovative learning methodologies, the need of perfect balance between Teacher Talking Time (TTT) and Student Talking Time (STT) during any session and we have learnt about many new methodologies such as Socratic questioning, Solution thinking etc. that ensure student centric learning.
EXPERIENCE SHARING

Trans4m-PH EXPERIENCE FROM PROJECT MANAGEMENT PERSPECTIVE
Trans4m-PH EXPERIENCE FROM PROJECT MANAGEMENT PERSPECTIVE

By Selima Sara Kabir, Tahsin Madani Hossain, Adrita Rahman, BRAC JPGSPH, BRAC University

In the past few reflections in our publication, trained faculty and facilitators under the Trans4m-PH project have shared their personal experiences and learning takeaways. Now, we will share some unique insights into how the situation differed in the background for us as project managers.

The Trans4m-PH project has trained 36 faculty and produced 9 reformed courses between 3 institutions over 3 years. In order to ensure that quality deliverables were produced on time, the project management team worked behind the scenes with several other actors.

At the beginning of each year, it is the project management team’s responsibility to liaise with each institution to receive nominations for the faculty who will receive training that year. The teams are then provided with the Needs Assessments form, and we scheduled meetings with the Competency-based Design Consultant to help each newly appointed team with filling out the form.

Over the course of each year, we then organize, and host (or assist in hosting) relevant meetings and workshops as scheduled per our workplan. The project managers are responsible for all logistical planning required for these workshops from booking tickets, liaising with embassies and high commissions for visas, as well as caterers, local transport and hotel stay. Of course, this specific component of our responsibility was dropped due to COVID-19, which made travel impossible.
During this turbulent time, we worked closely with our partners and EU correspondent in order to ensure that our project remained on track despite the pandemic. We shifted all of our activities online and had to adapt to new and unexpected challenges along the way. One of these involved breaking up our 3-day workshops into 1.5 hour long weekly sessions spread out over 2-3 months as it was not possible to keep participants engaged effectively through longer sessions on Zoom. With slight tweaks along the way, we were able to maintain our schedule and stay on top of our deliverables despite the COVID-19 outbreak.

The COVID-19 pandemic increased our role in new and interesting ways. Even though we had roleplayed as students before as well during Mock Sessions (where trained faculty test out methodologies on peers and colleagues to get feedback on the efficacy of the methodology), during the pandemic this was more regular as it was not always possible to bring in other colleagues as easily as it was before. We were also engaged in the learning and picked up on new interactive virtual tools such as Coggle, Mentimeter, Jamboard and more.

Other responsibilities included archiving and collating all deliverables. We set up an internal Google Drive containing Master Folders for each national HEI by year. These folders contained sub-folders for each Component, deliverables and drafts (including documents with feedback from program country facilitators). A separate folder was set up for the Steering Committee, containing meeting minutes and signed copies of the recommendations from each year. Another separate folder was set up by us to keep records of management and finance activities including all correspondence (emails to and from partners).

For ease of communication and management, Whatsapp groups were opened between Project Management team and each of the 5 HEI teams from both partner and programme countries. Our learning from Year 1 was a request for a shared platform to be accessed by all partners. While each partner had their own folders and Project Management team had systems in place, the sharing allowed teams to have access to important documents, recordings/minutes from meetings, etc in a convenient location. The shared folders add another layer of sustainability.

One important role we had as project managers was to ensure that all indicators for project management were aligned with outcomes and outputs from the project. A weekly deliverable tracker was introduced. This was a checklist developed to provide curated feedback for each deliverable. This tracker allowed for even closer monitoring and providing support and clarification by project management team, as required. The project management team tracked different versions of drafts and corresponding facilitator comments as a means to monitor quality and progress.
In fact, for Quality Assurance a continuous feedback cycle was set up, which allowed for real-time quality review of all resource materials, faculty progress and ensuring outputs were in alignment and of quality standard for the 4 Components. There was an ongoing iterative quality cycle process that continued until the end of the year. This on-going process allowed for project management team to course correct by incorporating all recommendations iteratively and regularly in the implementation of the tasks. This real-time tracking of quality and documentation of progress and feedback remains as a living archive.

This archive is now uploaded onto the E-Learning Hub on the Trans4m-PH website. We were also involved in oversight of website development and creation of the E-Learning Hub. These were both launched on the day of the National Symposium (the last event we organized for the project) where we celebrated the closure of the project, while simultaneously preparing for our activities to continue and thinking up ways forward.

The Trans4m-PH project was a revolutionary journey that not only strengthened our faculty and courses, but built capacity within the three of us as project managers. The project taught us a lot about time management, quality assurance and events & logistics planning; all of which are important technical competencies that we will carry with us in whatever projects we work on next.
EXPERIENCE SHARING

HOW THE IUB-ICCCAD TEAM Trans4m-ED THEIR CURRICULUM?
HOW THE IUB-ICCCAD TEAM Trans4m-ED THEIR CURRICULUM?

by Dr. K.A. Rabbani, Md. Ekhtekharul Islam, Karishma Sinha, Tahmina Sultana, Tanvir Ahmed Haroon & Saquib Ahmed Khan, ICCCAD-IUB

A team from Bangladesh comprising of members from the International Center for Climate Change and Development (ICCCAD) and the Department of Environmental Science and Management (DESM) at Independent University, Bangladesh (IUB) had the opportunity to work on an international project called Trans4m-PH (Transformative Competency-Based Public Health Education for Professional Employability in Bangladesh's Health Sector). The nine member team included faculty facilitators with various years of experience - some of the members had more than 15 years of teaching experience and some were just starting their academic journey.

The Trans4m-PH experience was groundbreaking for many of the team members. The members were initially skeptical whether a learner centric, competency-based remodeling of their elected courses would be feasible and implementable within the context of Bangladesh or not. Such ideas however quickly changed and ultimately vanished as the team worked with the brilliant mentors of the Trans4m-PH Project. The mentors quickly dissected the current problems in the course content and identified the mental barriers that the mentees were under. It was then that they highlighted the brilliance and the relevance of learner centered techniques and methods, (the core approach of the Trans4m-PH project) as they applied them in their mentorship of the team. The team members were soon in charge of their work, were learning by doing, and were convinced of the appropriateness of activity based, learner centered teaching. Methodically each individual session of the courses was redesigned, revamped, and aligned with the learning objectives of the courses which were designed from the perspective and needs of the learners. Some of these sessions and activities were tested in the classroom with positive and enthusiastic feedback from the involved students.

Despite the challenges imposed by the COVID-19 global pandemic, the entire Trans4m-PH team quickly adapted to the condition and continued the process online to achieve the project’s objectives. With very active support from the mentors, the team members started utilizing the easy-to-use free tools and apps to offer an interactive learning environment while teaching online, including Coggle, Slido, Mindmeister and Jamboard. The team members very dynamically applied the methods in other courses they facilitated at IUB and shared the feedback they received from the learners. Therefore, the
learnings from Trans4m-PH activities have expanded beyond the project scope and created a more significant community impact. Exploring various learning techniques, listening to the perspective of different facilitators and the ability to interact, share and learn from our national and international partners was exciting, instructional and inspiring.

All of us in our group feel that the Trans4m-PH project has changed our perspectives on teaching and learning and was very important for us to realize the importance of learner-centered, active learning. This project gives us the opportunity to not only acquire new information more effectively, but also to retain that knowledge for later use. We are encouraged to access previously acquired information and then put that knowledge into action, so that we can commit it to long term memory. It also allows us to go at our own pace and to pick and choose which learning materials best suit and which lessons we will explore next. This project may give the power back to all of us through involving a great deal of group collaboration to solve problems by communicating with peers.
COURSES REFORMED AND TEAMS
COURSES REFORMED AND TEAMS

ASIAN UNIVERSITY FOR WOMEN (AUW)

Year 1 (2019)
Programme: Bachelor of Science in Public Health
Course: Infectious and Tropical Diseases Epidemiology (PHST 3034)
Team: AKM Moniruzzaman Mollah and Nazmul Alam

Year 2 (2020)
Programme: Bachelor of Science in Public Health
Course: Nutrigenetics
Team: Nabila Ishaque Ira and Anika Asgar
Mentor: AKM Moniruzzaman Mollah

Year 3 (2021)
Programme: Bachelor of Science in Public Health
Course: Environmental Health (ENVS 3009)
Team: Sayed Mohammad Nazim Uddin and Nema Marjana
Mentor: AKM Moniruzzaman Mollah

BRAC JAMES P GRANT SCHOOL OF PUBLIC HEALTH, BRAC UNIVERSITY (BRAC JPGSPH, BRACU)

Year 1 (2019)
Programme: Master of Public Health (MPH)
Course: Anthropological Approaches to Public Health (MPH 512)
Team: AKM Mazharul Islam, Farhana Alam and Ishrat Jahan

Year 2 (2020)
Programme: Master of Public Health (MPH)
Course: Gender, Sexual and Reproductive Health and Rights (MPH 660)
Team: Nadia Farnaz and Wafa Alam
Mentor: Farhana Alam
Year 3 (2021)
Programme: Master of Public Health (MPH)
Course: Introduction to Public Health: Its Purpose, Values and Practice (MPH 501)
Team: Proloy Barua, Adepto Intisar Ahmed, Nibedita Sarkar,
Mentor: Farhana Alam, Nadia Farnaz and Wafa Alam

INTERNATIONAL CENTER FOR CLIMATE CHANGE AND DEVELOPMENT (ICCCAD)-INDEPENDENT UNIVERSITY, BANGLADESH (IUB)

Year 1 (2019)
Programme: Master of Science in Climate Change and Development (CCD)
Course: Climate Change and Health (CCD507)
Team: Md. Nadiruzzaman, Karishma Sinha and Tania Ahmed

Year 2 (2020)
Programme: Bachelor of Science in Environmental Science and Management
Course: Climate Change and Society (ENV415)
Team: K A Rabbani, Md Ekhtekharul Islam and Saquib Ahmad Khan
Mentor: Karishma Sinha

Year 3 (2021)
Programme: Master of Science in Environment Management
Course: Disaster Risk Reduction (ENV 530)
Team: Tanvir Ahmed Haroon and Tahmina Sultana
Mentor: Md Ekhtekharul Islam
FACES BEHIND
THE Trans4m-PH PROJECT
FACES BEHIND THE Trans4m-PH PROJECT

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