**Key messages from surveys conducted by GIST task team on innovation and technology in training**

**February 2019**

**Executive Summary**

* The Task Team conducted a survey of GIST members in December 2018 and January 2019 to better understand what the needs of GIST members and their beneficiaries are in this area and how to better leverage the Network’s potential on the topic. 8 out of 21 members have responded to this survey.
* The respondents could be divided into two broad categories: those who already deliver e-learning and those who are new to e-learning but are interested in examining/developing this mode of delivery as part of its training portfolio.
* The need of respondents can be categorized into those that are related to a) making a more strategic use of e-learning, b) strengthening pedagogical and instructional design and keeping up the pace with technology and the way people learn things, most notably mobile technology, c) understanding specificities and good practices in project management and administration of delivery of e-learning, d) financial opportunities and financial sustainability of e-learning.
* Some of the key findings related to good practices have shown the role e-learning could play in increasing outreach, complementing and in some case substituting classroom learning, as well as the importance of professional instructional design and peer learning, use of Quality Assurance Frameworks and advanced evaluation techniques to understand what knowledge and skills learners then apply and what not in their subsequent work.
* E-learning platforms offering user analytics and built-in authoring tools can further improve the effectiveness of e-learning design and delivery and making collaboration between subject matter and instructional design experts more productive and efficient. Among lessons learned were mentioned the critical importance of highly interactive approach to the design of e-learning to keep the audience engaged, as well as that of partnerships, communications and constant innovations to making e-learning platform widely used.
* Two concrete recommendations that have emerged from the survey are related to the need to create a community of practice on e-learning between GIST members and establish a common, user-oriented gateway to the learning courses of GIST members.

**DETAILED FINDINGS**

This section describes the findings from a survey conducted in December 2018-January 2019 among GIST members. 8 GIST entities have provided their responses to all or some of the four questions (each of the four questions had two sub-categories).

This survey was conducted with a view to defining the scope of work of the GIST Taskteam on innovation and technology in training in 2019.

**SECTION 1. OBJECTIVES AND NEEDS OF TRAINING ENTITIES REGARDING E-LEARNING, INCL. E-LEARNING PLATFORMS**

1. **Needs related to e-learning in general:**

The responses have demonstrated that while some GIST members have already been running online programmes for some time, others are interested in experimenting or launching online learning programmes.

Several needs have been identified when it comes to e-learning. The first need is related to understanding **how to better and more strategically leverage online learning** as a complement to face-to-face training, or partial replacement or else a new mode with specific limitations and opportunities, more specifically, how to use e-learning to:

1. Raise awareness of potential beneficiaries of the advantages of e-learning as a proxy for face-to-face learning.
2. Train/reach more people who cannot attend regular/short courses on premises especially staff of National Statistical Systems (NSSs).
3. Offer more courses to our customers through e-learning
4. As a complement to classroom formats.
5. Ensure better control over the quality of course content, better opportunity to evaluate the impact of the course on the participants and more cost efficiency.

The second need is related to the **improvement of pedagogical approaches used in current e-learning** offers to:

1. Provide flexibility to leaners to select topics they wish to learn
2. Efficiently meet the learner’s needs while maintaining some control over course curriculum.
3. Enhance pedagogical approach by encouraging the sharing of practices on the following elements:
* How to make e-learning offer better respond to leaners’ needs?
* What is the relative proportion of interactive vs non interactive materials by looking at trends in materials published on others platforms – and usage statistics, for different courses with different audiences (seniority, user/producer, type of jobs, etc.).
* Is the e-learning provided in a one-way broadcast or learners can share their own knowledge which can be reviewed and validated by their peers and trainers?
* Are there formal and informal training sessions in case others would like to further develop their skills in certain areas?
* How is the internet connectivity in developing countries being addressed and any stories on mobile-ready e-learning platform.
* Which of the two is preferred between timed and own-paced learning approach?
1. Anticipate future learning needs related in response to technological developments influencing the way data producers work and the kind of data they work with.
2. Ensure and evaluate how learners’ retain and apply knowledge and skills.
3. Leverage technology such as augmented learning and VR, mobile, etc.
4. Understand better where micro-learning can replace or complement more structured learning.

The third need is related to the **organization of the process, quality assurance mechanisms** and **project management** in the area of e-learning, with some of the areas where GIST members would like to hear form others including:

1. Specificities of instructional design compared to face-to-face learning.
2. Possibilities for externalization of conceptual and practical development partially or fully and how to assess related costs.
3. e-Learning development standards used.
4. Approach to management of licenses and other intellectual property rights.
5. Ensuring protection of personal data.
6. Certification schemes.

The fourth need is related to **fundraising for an e-learning platform**, more specifically, about

1. How to obtain financial and technical support in establishing an e-learning platform.

Overall, there was a sense that many GIST members could greatly benefit from **a community of practice** on this topic.

1. **Needs related to e-learning platforms:**

Similarly to e-learning, some GIST entities already have their e-learning platforms while others don’t. Those who have platforms note mixed experiences and difficulty to keep up the pace while also emphasizing some advantages that they can offer.

GIST members who already have experience with e-learning platforms would like to know about solutions for **an ideal platform** that

1. Could have a modern design that offers timelessness and adaptability to help meet evolving learning demands.
2. Can provide the learner with an intuitive and engaging experience that can present statistical content in a visually dynamic and entertaining way.
3. Can provide efficient and cost-effective translation capabilities.
4. Is user-friendly and has built authoring tools that offer course designers and instructors a collaborative online space to efficiently communicate and address content development (e.g., through the use of flexible, effective, and dynamic design templates that help with the building of the course structure and content and enabling the course instructor visualize their face-to-face course in an e-learning environment to more effectively develop course content).

GIST members would like to exchange and hear from others on **cost-effective solutions to the administration and infrastructure**, and more specifically,

1. What type(s) of platform(s) do the other members use (in-house, commercial, cloud services etc.)?
2. Are the used platforms developed in-house or by external contractors?
3. What software do the members use? (commercial, open source etc. – please provide details)
4. Is the access to the platform(s) open to other organisations?
5. It would be good to have a discussion with members on the practicality of e-learning platforms when internet connection is not optimal – which is the case in most developing countries contexts. Whether some platforms features / specificities work better than others, etc.
6. What are the recommended software for developing an E-learning platform?
7. Any concerns regarding open-source software platforms? What is the cost range for commercial software?
8. Cost to prepare the course to be delivered via e-learning platform.
9. Is the platform able to monitor the progress and certifications obtained by users and tracking progress against their set learning objectives?
10. In order to incentivize the learners’ pace and completion of the course, are there platforms that would incorporate gaming features as part of the course?
11. Are there possibilities of incorporating video-conferencing if some learners need one-on-one attention on some difficult questions?
12. What are best technologies for running webinars in general and those that require blackboards? There are many technologies currently in use. Which ones work well in developing countries?

GIST members would also like to learn more about other attributes that can make **a platform popular with potential beneficiaries**, and exchange on:

1. Possible path ways that would lead an online learning programme to gain credibility in potential beneficiaries.
2. How to run a platform as a non-profitable service meeting demand from NSOs in a specific region, for example, while ensuring quality to its recipients.
3. Strategies for promoting the platform among potential constituencies.
4. Strategies for sustaining a successful platform over time.
5. Partnership models involving a number of organizations that can help enhance outreach and impact of the e-learning platform offerings.

**SECTION 2. GOOD PRACTICES RELATED TO E-LEARNING COURSES AND PLATFORMS**

1. **Good practices on e-learning in general:**

Only several GIST members responded to this question. A number of good practices has been shared on the choice of e-learning mode and pedagogical approaches.

Regarding the **choice of the elearning mode**, the following was considered as positive experience:

1. Using e-learning as a substitute for those who cannot attend in person (e.g. WB LSMS team provides face-to-face training to practitioners in the design and implementation of household surveys).
2. Using e-learning to increase number of beneficiaries from Arab countries whose travel costs and visa issuance are difficult to maintain (AITRS).
3. Using e-learning as a complement to face-to-face activities or a blended mode (e.g., e-learning used by UNITAR to provide theoretical introduction with examples before participants do face-to-face training where they can focus more on practice and peer learning).

Several good practices have been shared on e-learning design, such as:

1. Utilizing peer-to-peer learning tactics by engaging learners in topic-related forum discussions or group projects. This helps create a learning community that is resourceful and limits the amount of involvement of the course instructor (which can become costly). The role of the course instructor after developing the course should be to occasionally lead discussions in the forum and hold live Q&A sessions.
2. Following an instructional design procedure that includes the following steps:

1. Identify learning objectives;

2. Create assessment questions;

3. Develop course content (videos and on-platform text);

4. Design supporting graphics, examples and practice activities.

1. Course videos should prioritize real-world examples and provide in-depth explanation on instructional material, as necessary, rather than repeat material that is already stated as text-on-platform. Each video should also aim to be concise (between 3-5 minutes).
2. Use of quality assurance frameworks for developing and ensuring the quality of the e-learning courses (UNITAR’s QAF following ECB Check requirements).
3. Evaluation of learning outcomes (e.g., UNITAR is using the Kirkpatrick evaluation model and regularizing Level 3 evaluations assessing the application of knowledge and skills on-job after some time after the learning event).
4. E-learning courses can be run as facilitated or non-facilitated courses depending on the course learning objectives. Facilitated mode is particularly important for more advanced e-learning courses or for topics where open-ended assessments and qualitative feedback are particularly useful.
5. **Good practices on e-learning platforms:**

Several GIST members have their own platforms on which they have shared experiences.

1. Many platforms provide an own-pace approach. It includes exercises which learners can attempt to on several times allowing them to further practice the topic if not well understood. (e.g., World Bank, UNITAR)
2. Some platforms offer flexibility not to register and there is no certification. The platform is open to everyone and can be accessed via website.
3. Other platforms involve registration and course certification based on completion requirements and participation opportunities varies from course to course depending on whether this is a MOOC, or by invitation only for facilitated courses with a limited number of participants (e.g., UNITAR). Many users attribute high importance to certification.

**Section 3. INNOVATIONS (INCL. TECHNOLOGY-DRIVEN) RELATED TO E-LEARNING COURSES AND PLATFORMS**

1. **Innovations related to e-learning in general:**

GIST members have highlighted several innovations on how to better leverage technology for enhanced e-learning experience. These include:

1. Experimenting with prioritizing course videos towards policy-making interviews. This way, the videos are less focused on instructional material, but rather on real people using the discussed topic to achieve real economic improvements.
2. Examining opportunities to use platforms with e-learning authoring tools and design templates, to accelerate the process of publishing and updating course content.
3. Allowing learners/users to ask questions directly to the trainers either through messages, live chats, or video conferencing is an area that has seen improvements in some of the e-learning and support services.
4. Leveraging more Virtual and augmented reality for e-learning courses.
5. Making all courses available through mobile learning.
6. Building in learning reinforcement plans through integrated mobile applications.
7. Introducing more micro-learning.

GIST members have also identified offers of new massive open online courses such as those offered by World Bank Group, or the course on Data for journalism as successful innovations.

1. **Innovations related to e-learning platforms:**

Some innovative practices have been shared, in particular:

1. Some platforms (IMF) offer data dashboards that measure a range of events between the learner and the platform. These events include time spent watching each video, time spent on each lesson, progress/performance over time of each learner, etc. By properly analysing this data, the e-learning content can constantly be improved to meet the demands of the learner.
2. Social media integration on Coursera.
3. An interactive platform providing user forum, search topics within user comments, video conferencing, and live chats while controlling for personal information.
4. Platforms that have built-in algorithms to facilitate self-assessments to select a course or plan a learning path before he/she is enrolled.

**SECTION 4. MAIN LESSONS LEARNED IN THE AREA OF E-LEARNING COURSES AND PLATFORMS**

1. **Lessons learned on e-learning in general:**

While recognizing that e-learning helps save time and costs, reach out to wider audiences and save learning resources, GIST members have shared several lessons learned:

1. In exploring the cost-effectiveness of different e-learning production methods, we have learned that it is most cost effective to limit the amount of camera-time by instructors. This is especially true for e-learning that is planned to be translated without the use of subtitles. However, it is significant to note that studies show the importance of, at least, presenting the instructor on camera to provide credibility to the learners.
2. In an online environment, keeping your audience engaged can be a difficult task. That is why it is important to highly prioritize interactive elements, visuals, and activities in your e-learning that will keep the learner engaged and active.
3. We’ve learned that it is essential to identify all the roles/responsibilities of the e-learning development team and to limit the number of people involved to only the essentials. The more people involved, the more difficult it can be to communicate ideas and reach a consensus to meet deadlines.
4. Updating the course content has generally been a challenge making it become obsolete. Sometimes, outsourcing the services brings challenges as the providers work at their own pace which may not be in line with the demands of the course. However, on the positive note, the course materials are readily available to a wider audience.
5. It is often challenging to keep the community of practice alive beyond the course.
6. E-learning as all IT intensive areas is part of a fast-changing environment, approaches to e-learning change significantly making learning products look out of date quite quickly. One needs to ensure strong substance and instructional design while periodically updating the course design.
7. It is difficult to generate sufficient income solely through e-learning for public officials, this needs to be subsidized/covered through donor funding when it comes to participants from developing countries.
8. **Lessons learned on e-learning platforms:**

Regarding the e-learning platforms, GIST members have also shared several lessons:

1. As previously stated, the platform should offer design flexibility for both learners and developers. The learner should be able to craft their own course curriculum to meet their personal learning needs, while also completing requirements defined by the instructor to earn credit for the course.
2. The developers should be able to efficiently and effectively collaborate on content development and design within the e-learning platform and adjust or amend content throughout the shelf-life of the learning product.
3. An e-learning platform should provide room for feedback from users and be interactive.
4. It should provide both audio and visual aids.
5. It should also allow users to save and return to their work – at their own pace.
6. Furthermore, the platform should allow learners to interact and allow certification for those in need.
7. Partnerships and communication are key for ensuring quality, increasing outreach and running a sustainable platform.
8. One has to constantly maintain and upgrade the platform in response to innovations in e-learning industry.