

## **Content Framework on iGOT Platform**

### **1. Introduction**

Content is arguably the most important component of the iGOT Karmayogi platform and will play a critical role in the success of the program. To drive adoption, iGOT Karmayogi will have to ensure that the content onboarded is not only engaging but is also of very high quality such that there is substantial impact on the competency level enhancement of learners. Thus, learner-centred, action-oriented and transformative content will be onboarded on the platform. iGOT Karmayogi would need to cater the diverse learning needs, preferences, and interests of a variety of 21<sup>st</sup> century learners, and will be sufficiently exhaustive to cover the learning needs of the civil services – both for their professional development and personal learning interests – instilling in them the attitudes, skills and knowledge to enable a more sustainable and just society for all.

The Content Framework is a recommendations document that provides guidance and standards for the development of online learning products for iGOT Karmayogi.

It is a guide for the learning community including CTIs, ATIs, content providers/external vendors, reviewers, learning managers and staff working or interested in creating online learning programmes, that can be used to:

- Guide the development and implementation of competency-based products (CBPs)
- Review online competency-based products (CBPs) being developed/onboarded on the platform
- Integrate cultural diversity and a gender perspective in all areas of online learning programmes
- Produce accessible digital content that all learners, regard-less of disabilities, are able to navigate, understand and interact with

The Framework is based on instructional design methods for developing and delivering learning programmes that seeks to change behaviour and improve performance.

### **2. Types of content**

The types of content that will be onboarded on the platform will be guided by two broad dimensions:

- (a) learning urgency and
- (b) learning model.

With regards to learning urgency, content will be trifurcated into mandatory learnings, recommended learnings, and open courses:

- Mandatory learnings will be specifically targeted to the competency requirements of a role and will be decided by the manager of the individual learner.
- Recommended learnings will include courses, modules and items that will help individuals progress in their career, build expertise and specialisation and/or meet their professional and personal aspirations. These trainings may be recommended by a manager and targeted to a competency or algorithmically determined by iGOT Karmayogi based on the learner's profile, learning history, learning goals etc.
- Lastly, open courses will also be available on the platform and will allow learners to expand their knowledge and skills in an area of personal interest.

With regards to a learning model, content will be created for face-to-face classroom-based learning, face-to-face flipped learning, online remote classrooms, online courses, and blended courses.

### **3. Content lifecycle**

To create a repository of content that is engaging and personal, it is essential to operationalise the content supply chain and empower all relevant stakeholders. A summary of the key steps in the content lifecycle on iGOT Karmayogi are described below:

#### **3.1. Discovery and identification of learning needs and gaps**

As we move from a rule based to role-based organisation, the learning needs of an individual will be strongly driven based on the competency requirement. As a first step, identification of learning needs may be carried out in the relevant Ministry, Department or organisations (MDO) through the FRACing process in conjugation with the current competency level of individuals. The gap between the required and current competency will guide the MDOs towards required competency building and hence the learning intervention required. Examining the context of the learning programme and determining its suitability, feasibility and scalability will be assessed in this step.

#### **3.2. Content Creation and Sourcing**

Content sourcing will rely on multiple channels of curated content including in sourcing, procurement of ready to use or white labelled content and bespoke content development, fit for purpose through engagement of specialist agencies. Subject Matter Expert (SME) should be identified to support with content development and learning goals identification.

#### **3.3. Content Validation**

At this step, it will be ensured that the content onboarded on the platform is appropriate, has high quality, is devoid of plagiarism, drives learning and engagement and is accessible for diverse users. Further sections in this document will detail out the different aspects of content validation and process to be followed in iGOT

### **3.4. Content Enhancement and Impact Scores**

The content on the platform will be regularly updated (at-least once every six-month or whenever there is a change in the content) to ensure accuracy, validity and relevancy. Impact scores on the platform will also reveal the need, if any, to update content. The score is an indicator of how impactful a course is for gaining a competency and is determined by assessing the success rate of competency progressions made by all individuals who have completed the said course

The efficacy of content or courses on the platform must be ensured at every step and needs to be monitored. To ensure that high-quality content is onboarded which is learner-centric, action-oriented and transformative, as well as significantly improves the competency levels of learners, a content framework and quality assurance framework has been defined.

## **4. Content Framework**

After rigorous analysis of transformative practices in the industry, the following salient points have been identified to keep in mind when analysing or creating content:

- The competencies that the content seeks to service should be called out at the very beginning of the content creation process.
- Learning outcomes should be established at the outset of each course and module. There should be a strong correlation between learning outcomes and competency requirements.
- Content that will be available on the platform will be consumed by diverse audience. Hence any content that is made available on platform should be inclusive, gender transformative, and free of bias
- All content being created, used and maintained on iGOT platform should be accessible to people with disabilities and should adhere to accessibility standards. Further details are provided in subsequent sub-sections
- Content being onboarded on platform should be the own work of content provider and free of plagiarism. There should be no copyright violation within the material being used to develop content (images, content etc.). Appropriate credits and referencing needs to be mentioned as applicable
- Style guidelines should be established for a uniform look-and-feel for the ease of users, including:
  - Catching the reader's attention with a relevant and inviting headline;
  - Breaking content into byte-sized learning modules which are ideally not more than 10 minutes long;
  - Using animations, images and eye-catching formatting to make content attractive.

- Deconstructing research and content into a naturally flowing, cohesive story; and
- Making content as interactive as possible.
- Language should be simple and easy to understand to respect diverse users.
- Assessments should test users on each learning outcome covered in the course.

## 5. Watch-Think-Do-Explore-Test (WTDET) Model

Based on global transformative practices, iGOT Karmayogi will be adopting the Watch-Think-Do-Explore-Test model.



**5.1. Watch:** Content provider should follow a micro-learning approach to content development. Educational materials should be as relevant and concise as possible. Learning activities should not present information through lengthy videos/ presentations/ documents, which are harder to retain and complete, but rather through shorter bytes of content that can enable learners to absorb more information without feeling overwhelmed. Thus, modules with short byte-sized videos or animation/ infographics can help convey the concepts as per the learning outcomes. also cater to a variety of learning styles and follow adult learning principles.

Following should be kept in mind while developing the content:

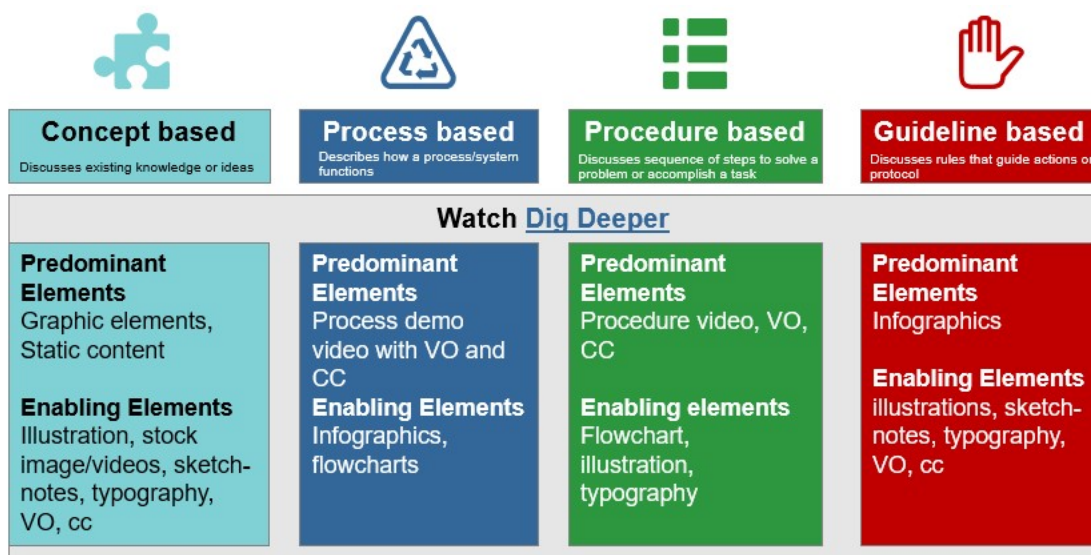
- i. Use micro-learning (byte/snack sized content of not more than 5-7 minutes long)
- ii. Formulate learning objectives from the learner's perspective and clearly call out the learning objective at the beginning of any module
- iii. Ensure learning activity laid out articulate the knowledge and skills learners should acquire by the end of the learning activity

Based on the type of content, predominant elements have also been suggested A variety of visual materials can be utilised (e.g. illustrations, videos, infographics,

flowcharts, etc.). Note that these are simply suggestions for the content curator and may be modified as per the requirement.)

- 5.2. Think:** A reflection quiz to promote higher order thinking. This should ideally be 3-5 questions but can vary depending on the topic. While designing this, the content curator should include simple questions that encourage critical thinking and reasoning skills, **avoiding mechanical repetition** (rote learning). These questions should also encourage students to reflect on the concepts presented and internalise them. The 'Think' resource is a reinforcement quiz with diagnostic feedback.
- 5.3. Do:** Scenario-based questions or simulation-based interactivities that are action-oriented to test application. In action-oriented learning, learners engage in action and reflect on their experiences in terms of the intended learning process. It is suggested to employ context-relevant scenarios followed up with slightly complex questions. Learners will answer 3 to 5 questions (which may be more or less depending on the topic) based on these scenarios to practice and apply their learning. These scenario-based questions should reflect real-life situations and help learners realize the impact of learning on their performance.
- 5.4. Explore:** Additional resource links for self-directed learning. Consider creating self-learning resources to make key information available to the learners to enhance their learning. Resources should be the following:
  - i. Readily available and easily accessible to learners after they have completed the course.
  - ii. Familiarise learners with other easily available resources that can be referred to at any point in time.
  - iii. Easy-to-understand short guides, factsheets, checklists, job aids, infographics, FAQs, and tips, amongst others, are some of the different types of resources that can be uploaded for learners to download.
- 5.5. Test:** Every course should have a graded assessment including a randomised, pre-determined set of questions from a pool (i.e. question bank). Assessments should reflect real-life situations and encourage learners to apply their learning. Every test should have a minimum passing criterion laid out in advance and communicated to learners before the start of quiz. In case the learner is unable to 'pass' the test, the course should be marked as incomplete and the system should prompt the user to retake the course/lessons along with test. Below are salient points to keep in mind when developing 'Test' material:

- a. For objective questions, MCQs are a well-suited format. On iGOT, the system will allow faculty to input correct answers beforehand, which will enable the automatic scoring of the questions.
- b. For subjective questions, multiple types of assessments can be used: by self, instructor, and/or peers. These can vary from finger exercises to final assessments:
  - i. Finger exercises are designed to help learners digest concepts. These can be interspersed within the course itself and can be graded or left unassessed. If instructors would like finger exercises to be graded, subjective finger exercises can be graded through either self-assessment or peer assessment.
  - ii. Final assessments which contain subjective questions can be graded by faculty.



## 6. Benefits of the proposed framework

The WTDET methodology:

- Inspires higher-order thinking
- Prioritises experiential learning (to drive positive change in the learner);
- Supports self-paced and on-the-go learning (respects the learners' time);
- Includes inclusive design philosophy (effectively tackles the various needs of diverse learners); and
- Inculcates human-centred problem-solving skills (focusing on understanding a problem from the perspective of the person experiencing it).

Further, the content creators should ask themselves these questions while creating a course:

- a. Is the course empathic towards who the learner is and what motivates them?
- b. Does the course effectively suit the needs of and is easy to understand for a variety of diverse learners (with different learning styles)?
- c. Is the content itself inclusive? Is it gender-, religion-, and caste-neutral?
- d. Does the content promote sustainable development?
- e. Are there enough real-life examples within the course to help the learner relate to and engage with the content effectively?

## **7. The human-centred design process**

A learner's journey on iGOT keeps human-centred design as a core design principle. Thus, when designing content for the platform, content creators must also adopt human-centred design principles. This process must include:

1. **Empathy towards the learner:** What will interest the learner most about the course, and what will motivate them to complete their learning journey?
2. **Feedback-driven iterations:** What has been the learners' feedback? I.e. what are the best aspects of the course, which aspects require improvement, and how should this feedback be incorporated?
3. **Diversity of learners must be respected:** Who are the different types of learners who will access this course, and does the course respond effectively to these diverse learning needs?
4. **Relatability is crucial:** Does the course include simple, conversational language to help learners understand effectively, and are the examples, visuals and scenarios relatable to the learners?

## **8. Diversity and Inclusion**

Whether designing a product, intervention, or content, embedding the concepts of diversity and inclusion, alongside sustainable development, should be of utmost importance. Rather than paying lip-service to these key concepts, they must be integrated within the content on iGOT.

Inclusive content is two-fold:

- i. It anticipates the varied needs of learners and aims to ensure that all learners have equal access to the content i.e. it takes into account the diversity of learners (including learners with disabilities, learners whose native language is not English, learners with technical issues such as low bandwidth internet or no access to audio, etc.); and
- ii. The content itself is inclusive (i.e. gender-, religion-, and caste-neutral), and does not harm the sentiments of any group.

## 8.1. Diversity of learners: people with disabilities

As a platform, iGOT expects the content developed to be accessible to everyone, regardless of any limitation they may have. Web accessibility means ensuring that websites, online content, applications, and platforms are usable for people of all abilities. It can benefit all users, making it easier for them to navigate and interact with online content.

Web accessibility becomes especially important for learners with disabilities. Disabilities can be visual, auditory, physical, speech-related, cognitive, learning, or neurological. While it is easy to imagine how certain disabilities affect accessibility – for example, someone with a visual impediment may require a voiceover for static content – others are less obvious and still require accommodation. For example, a learner who is colour-blind will require content designers to take into consideration various colour combinations.

“Training for All” is the vision for iGOT Karmayogi. In pursuance of this vision, iGOT strives to achieve the abovementioned accessibility standards, and make both its platform and content accessible to all learners. Although many of the above-mentioned points are more relevant to the platform-developing team, content creators are also required to look through and adhere to the accessibility guidelines put forward by W3C. All content needs to be evaluated on following parameters to check for web accessibility:

- a) **Usage of Colours:** When creating content, appropriate colour combinations are essential to ensure that all learners can see the content easily. Because red-green colour blindness is the most common, designers should avoid using red and green together. If it is necessary for a visual to be red and green, designers should use a lighter green and darker red to help colour-blind learners distinguish between the two colours.
- b) **Accessible documents:** Record audio narrations for all online training content that is text heavy. Learners who are visually impaired can listen to the key takeaways instead of reading along. When using images and tables, use descriptive text or alt text – embed this in the document containing the image or table. Use PDFs that have been saved as searchable text, not images. It is recommended to use built-in tools such as headings, lists and styles to organize the content following a logical order and to make it easier for screen readers to read your documents
- c) **Fonts:** Font size is important. Bigger is better. Keep your text large, a minimum of 12-point size depending on the font style. Keep a track of the fonts being used. For instance, using the Sans-family fonts is recommended to make the text readable for those with dyslexia (Please refer to W3C for appropriate fonts that should be used). When emphasising text, try to avoid using italics. This distorts the letter and throws off



patterns, making things harder to read. When you need to add emphasis to a section, try using a bold font instead. Also, it is recommended to avoid blinking or moving text

- d) Language:** A diverse range of learners also means learners who speak a multitude of languages – learners whose native language may not be the language of the content uploaded. In the best-case scenario, all content and material should be published in all official languages as laid out in the Constitution of India. If, however, this is not possible, then English subtitles should be provided (if the video itself is not in English). Use spell checker to ensure grammar and spellings are correct.
- e) Hyperlinks:** Avoid hyperlinks wherever possible, instead use buttons for ease of users. When used, hyperlinks and buttons should be named according to content they are linking to. Avoid using links such as “Click here”, “Know more” etc.
- f) Multimedia:** Multimedia in form of audio and video files are important components of e-learning. Any multimedia used as part of e-learning should have an accompanied transcript that may also be downloadable. Provide “alt text” when graphical elements (photos, infographics, charts, etc.) convey key information. Drop-down menus can be difficult, if not impossible, to navigate for users with mobility impairments, so it is recommended to avoid using them. While eLearning interactivity is a great way to engage your learners, you should try to avoid complex interactions when developing accessible eLearning material. Learners with poor motor skills may not appreciate, for instance, intense drag-and-drop interactions. Interactive elements should be designed as simply as possible.
- g) Navigation:** It is essential that all content can be read by screen reader. Use semantic HTML code to make it easy for screen readers to understand. Semantic HTML or semantic markup requires using appropriate and correct HTML elements and tagging to identify content and enforce hierarchy. (e.g. headings `<h1>`, `<h2>`, button `<button>`, numbered lists or ordered lists `<ol>`, bulleted lists or unordered lists `<ul>`, etc). Include “Skip Navigation” and “Back to Top” links as they are commands often used by learners with visual impairment

## **8.2. Inclusive content**

Other than considering the diversity of learners, the content uploaded itself must be inclusive. The issue of how to represent gender, religion, and caste in content to be uploaded on the platform is an important consideration as it will reflect the overall culture and values of the government. It is therefore essential that the content developed is inclusive, free of bias, and gender-, religion- and caste-neutral.

Portraying a greater percentage of women in eLearning, though, is not the wholesome solution of authentic gender representation. It’s also worth asking some tough questions

about *how* women are portrayed. Are women being portrayed in only supporting roles, or needing help, while men are in positions of authority and/or providing expertise. It is not only about having characters who are female but also the role that they are playing in the learning. So, what do we do while developing the e-learning content? Some of the approaches that are widely used across industry are listed below:

- If it is felt e-learning content will reveal biases one way or another, remove gender from the design of characters altogether
- Write characters in authentic situations, name them only with an initial, and then once the storyboards are complete, use a random name generator to decide which ones are male, female or transgender
- Use gender neutral pronouns (they/them)

It is important to not only look at the gender specific semantics being used within the course but also to look the content of the course itself from a gender lens. Any course being developed from a gender lens can be subdivided into following category

- a. **Gender Unintentional:** Content devised do not recognise impact of gender on the problem being addressed through the course. It does not integrate a gender lens in the proposed approach, or target gender gaps.
- b. **Gender Intentional:** Course itself is designed in a way to reduce gender gaps
- c. **Gender Transformative:** Course is designed to transform gender power relations and/or reduce gender gaps in agency over resources.

## 9. Sustainable Development (SD)

The target audience of iGOT Karmayogi are government officials who develop policies and framework for the nation. Hence, it becomes important that all courses being uploaded on the platform is looked from a sustainable development lens. These officials need to not only look at solution to problems and policies being developed from a current perspective lens but also based on the understanding that what we do today can have implications on the lives of people and the planet in future. It is about including sustainable development issues, such as climate change and biodiversity into teaching and learning. Individuals are encouraged to be responsible actors who resolve challenges, respect cultural diversity and contribute to creating a more sustainable world.

Taking reference from Education for Sustainability Development (ESD) toolkit, the course needs to be assessed under following categories:

- Environmental Sustainability
- Sustainable consumption & production
- Propagate Peace & Nonviolence

- Human rights
- Human Survival & well-being
- Culture diversity & Tolerance

#### **10. Content Appropriateness & Copyright**

For content to be uploaded on the platform, it is essential that it is appropriate for all learners and is not offensive or hurt their sentiments. Hence it is essential to take care of following components:

- Content does not contain Hate speech, abuse, violence and profanity
- There is no sexual content, nudity or vulgarity in the course being developed
- There is no defamation of any institution or individual as part of the course
- Is appropriate for all users on the platform and do not hurt sentiments of any caste, religion or gender
- Content has ensured that all maps, borders and historical figures have been appropriately & accurately represented
- All content providers must provide an undertaking for all the course being uploaded that they have adhered to these content appropriateness guidelines

#### **11. Originality:**

All content being onboarded on the platform should be original and devoid of Plagiarism. If the content is copyright material, the content provider should own the copyright of the same. There should be no copyright infringement

- Appropriate references and credit should be provided for content that has been borrowed from other sources
- When using photos or videos of people, have them sign a personal release agreement
- Provide a list of all references used at the end of the learning activity
- For all content being onboarded on platform content providers will be required to take a plagiarism test on a credible website, some of which are listed below and produce a plagiarism-free certificate. The storyboard/transcript of the content would need to be checked on any of the below website
  - Turnitin
  - Scribbr Plagiarism Checker
  - Copyleaks