

Content Framework & Quality Assurance

iGOT Karmayogi

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Glossary

ATI	Administrative Training Institute
CBP	Competency Based Product
CC	Content Curator
CTI	Central Training Institute
DoPT	Department of Personnel and Training
FAQ	Frequently Asked Question
FRAC	Framework of Roles, Accountability and Competencies
HTML	Hypertext Markup Language
iGOT	Integrated Government Online Training
MCQ	Multiple Choice Question
MDO	Ministry, Department and Organisation
NPS	Net Promoter Score
QA	Quality Assurance
W3C	World Wide Web Consortium
WTDET	Watch-Think-Do-Explore-Test

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About the document

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

It is a guide and toolkit 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.

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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 21st 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.

Creating and maintaining a repository this large and this critical cannot simply be left to a few ministries, departments or organisations (MDOs) in the government. Thus, a marketplace approach to content procurement and onboarding will be adopted to enable the creation of a self-sustaining ecosystem and drive the evolution of the digital backbone for learning. It will consistently and continuously offer a stream of content to iGOT Karmayogi, which will undergo iterative validation and improvement processes. As a content marketplace, iGOT Karmayogi will allow for content and service providers to compete for consumption, creating a natural evolution where content is enriched, deepened and widened. The marketplace will use multiple pricing models like freemium (i.e. a few modules or all are free, but certification is paid), pre-paid (enterprise-wide consumption rights are paid for), usage based (pay per use) etc.

While the goal is to enable a content marketplace, the content delivery mechanism cannot be a pure-play marketplace from day one. In the initial period, the platform will need high-quality seed content to bring in users onto the platform and create required levels of stickiness, which can be achieved only when the users see value. Considering the importance of a critical mass of high-quality content from its early inception stages, it may be worthwhile to adopt a strategy where content is either created internally or bought from external providers while ensuring very strict quality control, and gradually easing the content onboarding requirements, eventually morphing into a full-fledged marketplace.

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 on the basis of 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.

Content lifecycle

In order 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:

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 on the basis of

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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.

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. **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
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, the following is required:

- Developing a content framework, that will provide the content creator with overall guidance on creating content for iGOT Karmayogi.
- Developing a quality assurance framework for the content to ensure minimum standards are met for any content being uploaded.

This document outlines the methodology which iGOT will adopt to ensure that **inclusive, high-quality, relevant, effective and engaging content** is uploaded as per competency requirements for the consumption of learners. The document covers the overall content framework to be followed in developing any course on the platform. It lists down the various aspects of the framework and intent behind including it as part of the framework. Followed by the framework, the document also documents the content validation process to ensure that the various elements of framework have been followed while uploading the content. This eases the content development process for content curator to ensure a high level engaging content is only uploaded on platform and avoid multiple re-works.

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2 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.

2.1 Watch-Think-Do-Explore-Test (WTDET) Model

Based on global transformative practices, iGOT Karmayogi will be adopting the Watch-Think-Do-Explore-Test model[1]. Figure 1 below outlines the model, followed by a detailed discussion of its various components.

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.

[1] We are grateful for the Wadhwani Foundation for their assistance in the development of this model.

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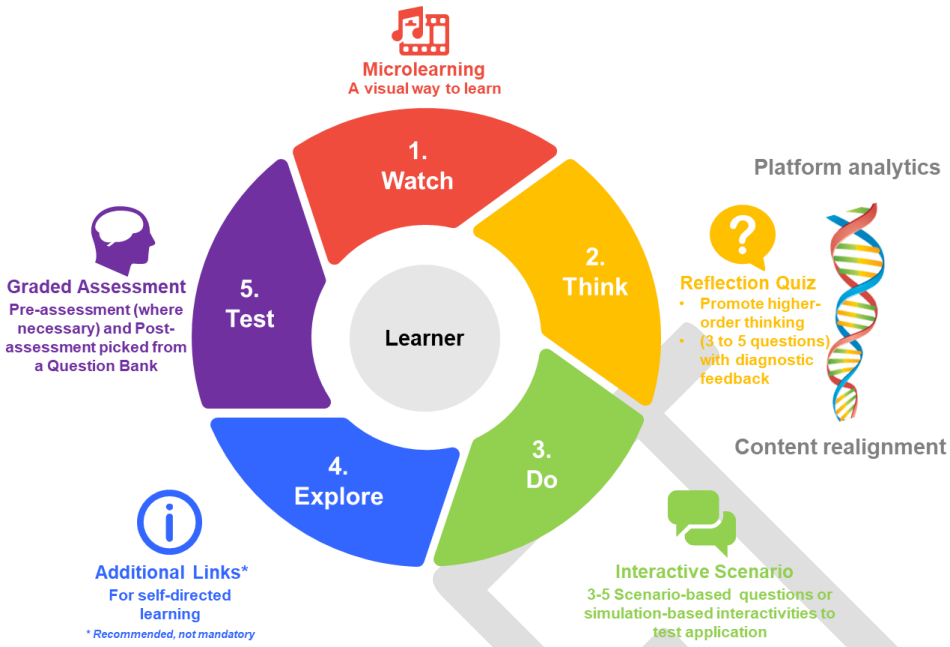


Figure 1 Content Framework Model

Following should be kept in mind while developing the content:

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

All 'content' may be categorised into one of the four types: concept based, process based, procedure based, and guideline based (see Figure 2 below):

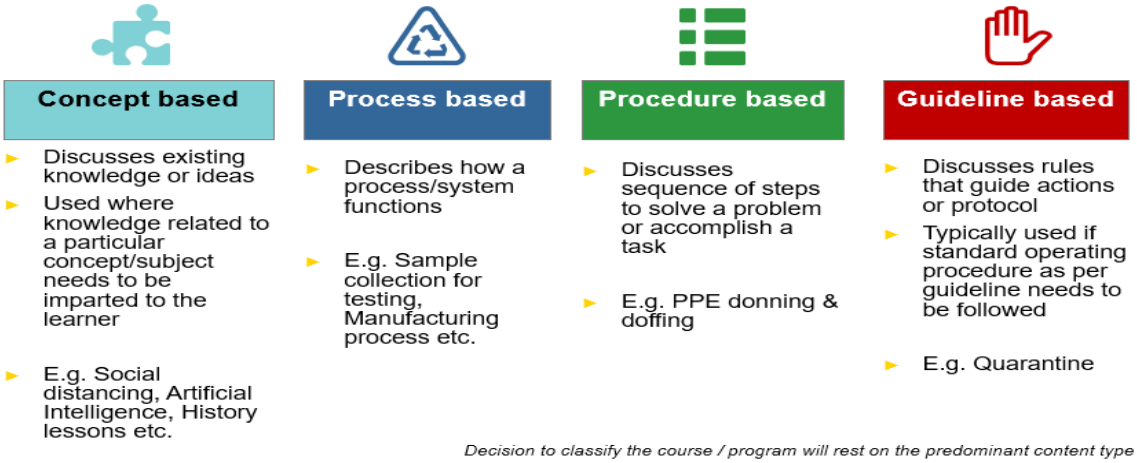


Figure 2 Content Categorisation

Based on the type of content, predominant elements have also been suggested (see Figure 3). 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.

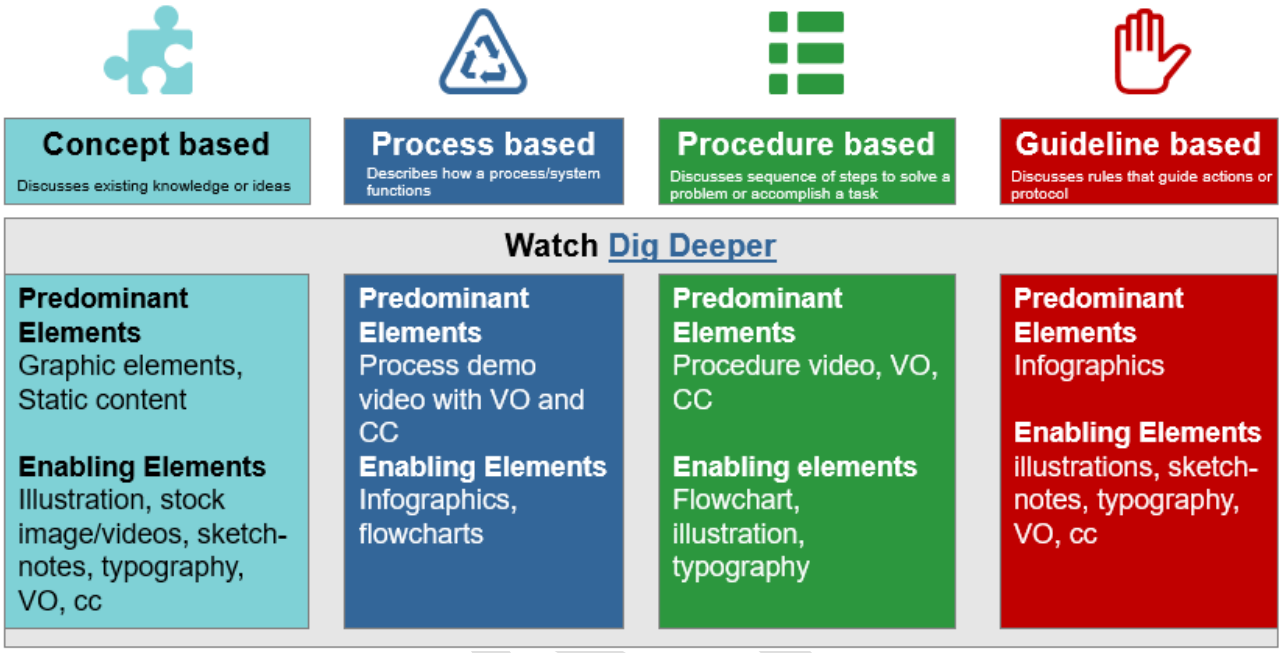


Figure 3 Elements for different content type

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.
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.
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:
    a. Readily available and easily accessible to learners after they have completed the course.
    b. Familiarise learners with other easily available resources that can be referred to at any point in time.
    c. 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. **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

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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.

Recommendations and/or exceptions:

- All courses should follow the WTDET methodology
- Every learning lesson/module should have WTDE components ideally in the same sequence and at the end of course, it should have the T(Test) component
- In most cases, a module could have multiple 'Watch' and 'Think' resources depending on the type of topic/subject/content, which is fine.
- In some cases, depending on the topic or subject of a course, it may not be feasible for content providers to create resources for all aspects of the model, in which case exceptions can be made. 'Watch' and 'Test' will remain mandatory but either of 'Think' and 'Do' may be forgone. However, in every such exceptional case, the course provider must provide a reasonable justification for doing so.
- All content should have consistency with design guidelines, style sheets and branding guidelines, which should be set by the relevant MDOs
- Ensure each learning module specifies the learning objective(s) addressed in that module
- Clearly align tasks and assessments to learning objectives, enabling adequate measurement of achievement
- Ensure the learning activity is reviewed by various stakeholders, such as SMEs and test learners; incorporate any recommended changes before uploading the course on iGOT

Benefits of the proposed framework

As shown in Figure 6 below, 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).



Figure 4 Benefits of WTDET model

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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?

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?

Overall, the WTDET model with a human-centred approach, will allow content creators to deliver courses that are transformative, of high quality, and inculcate in them the attitudes, knowledge and skills they require to succeed.

2.2 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:

1. 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

2. The content itself is inclusive (i.e. gender-, religion-, and caste-neutral), and does not harm the sentiments of any group.

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.

Standards play an important role in the development of accessible eLearning. The primary accessibility standards are the Worldwide Web Consortium's (W3C) Web Content Accessibility Guidelines (WCAG 2.0). According to W3C, four main principles, P.O.U.R., needs to be followed

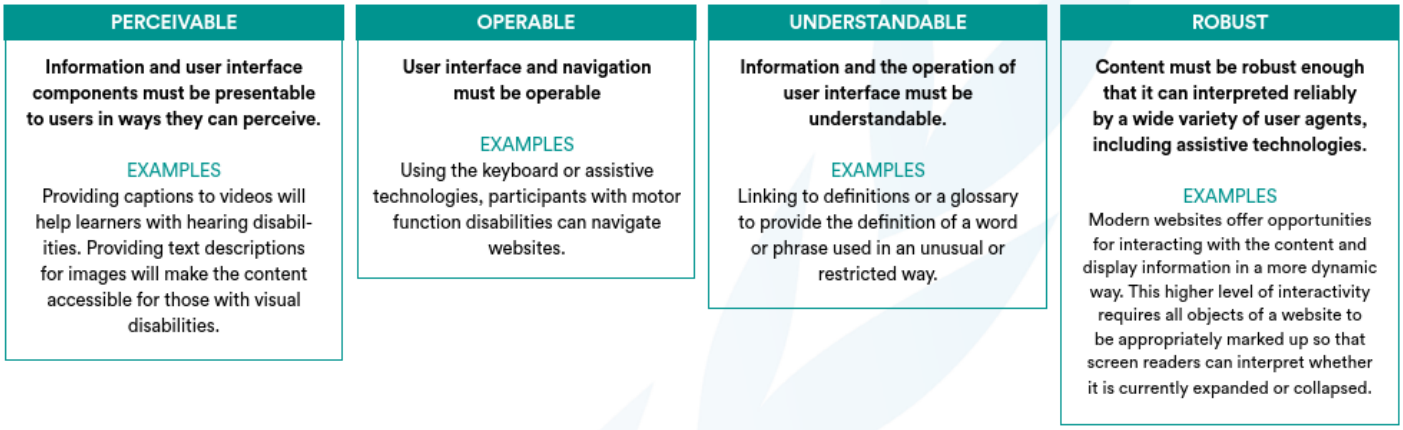


Figure 5 Main Principles of W3C (P.O.U.R.)[2]

"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 evaluated on following parameters to check for web accessibility:

1. **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.

2. **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

3. **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

4. **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.

5. **Hyperlinks:** Avoid hyperlinks wherever possible, instead use buttons for ease of

[2] Online Learning Framework by United Nations

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.

6. **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.

7. **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).[3] Include "Skip Navigation" and "Back to Top" links as they are commands often used by learners with visual impairment

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[4]:

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.

2.3 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

[3] Online learning framework by United Nations

[4] https://www.gatesgenderequalitytoolbox.org/wp-content/uploads/BMGF-Gender-Guide.pdf

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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.[5]

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

2.4 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

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

It is essential for the all content creator to follow the salient features listed down as content framework. This will ensure that the overall quality of content being developed meets the high standards being sought by iGOT. Following the guidelines will ultimately help the learning content in improving the competency of its learner and a higher impact score for both the content and CBP providers. Subsequent section will detail out the toolkit to measure the content being developed on the various parameters identified and help the content creator and reviewer in taking decision to onboard a course on iGOT.

[5] UNESCO: Education for sustainable development

3 Content Quality Assurance

The quality assurance (QA) of materials on online learning platforms aimed at large, distributed audiences remain a concern; the process is no different for iGOT. In its future state, iGOT will leverage the services of numerous vendors in developing competency-based products (CBP) across a variety of disciplines.

In addition to prescribing a standardised model for content creation, it is incumbent upon the iGOT to also prescribe a QA framework to maintain high courseware standards.

The proposed iGOT QA framework is benchmarked against renowned quality assurance programs for online courseware that have come to be regarded as the industry gold-standard in courseware evaluation.

Three of these programs include:

- Quality Matters Rubric Standards
- Rubric for Online Instruction from California State University Chico
- Online Learning Consortium's Five Pillars of Quality Framework

Quality Matters' Continuing and Professional Ed Rubric Standards are tailored to assist in the design and evaluation of instructor-led, mentored, or self-managed online and blended courses that have pass/fail, skills-based or other completion/certification criteria, but do not carry academic credit. These are a set of eight General Standards and 43 Specific Review Standards used to evaluate and aid the design of online and blended courses that have pass/fail, skills-based or other completion or certification criteria.

California State University Chico's Rubric for Online Instruction represents a systematic and developmental process for online course design and helps to evaluate the design of a fully online or blended course. The rubric was designed to answer the question, "*What does high-quality online instruction look like?*" and can be applied to any course that has online and hybrid elements.

Online Learning Consortium's Five Pillars of Quality Framework, which is always a work in progress, intends to help institutions identify goals and measure progress towards them. It tracks five inter-related areas as a measure of the quality of online courseware:

i. Learning effectiveness
ii. Access
iii. Scale
iv. Faculty satisfaction
v. Student satisfaction

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3.1 Content Evaluation framework

The iGOT Quality Assurance Process is based on the content framework explained in earlier section. To make the process easier for content creator and reviewers, an online course along with tool-kit has been designed that will involve the use of the following instruments at different points in the evaluation journey:

3.1.1 Gate Criteria qualification

This consist of mandatory requirements to be fulfilled by any course that needs to be onboarded on the platform. It consists of the following two sections:

a. **Content Appropriateness –** It checks for the content to meet basic appropriateness guidelines. In total there are 6 criteria which needs to be followed by content provider and provide a self-certification. In case any of the criteria is not met the content should be re-worked. A signed self-certification needs to be submitted by the content provider. The six mandatory criteria are listed below. Annexure I provide the self-certification format for all content providers:
   - 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

In case it is found out that a content provider has not adhered to content appropriateness, in spite of submitting the declaration and uploading content on platform, appropriate action may be taken (including blacklisting of the content provider)

b. **Plagiarism –** All content providers need to provide a certificate of originality of the content being developed, so that there is no issue of plagiarism and copyright. iGOT recommends the use of following websites to procure a certificate for plagiarism. In case any other software/website is used, please take a prior approval from DoPT/iGOT SPV
   i. Turnitin
   ii. Scribbr Plagiarism Checker
   iii. Copyleaks

Once any course clears these gate criteria, they may be evaluated on iGOT Quality scorecard.

Content creators will be required to submit a self-declaration that they have followed all the gate criteria listed down. A sample of self-certification can be seen in Annexure I

3.1.2 Quality Scorecard

Once any content passes the gate criteria, it will be evaluated for quality through a comprehensive scorecard. The scorecard is split across following **six categories**:

- **Instructional Methods** – determine how effectively the stated competencies and skills are acquired.
- **Assessment Design** – Good assessment design includes testing target competencies and skills readiness.
- **Competency and Skills** – The course helps learners achieve the stated competency and skill acquisition goals.
- **Learner Engagement** – These include techniques (such as real-life examples) to deepen learner engagement with the learning material.
- **Learner Support –** Resources included with the course to extend learning and enhance the asynchronous learning experience.
- **Diversity & Inclusion** – This is a separate rubric that will evaluate the course to be compliant to W3C's Web Content Accessibility Guidelines (WCAG) 2.0 to make it accessible for users with disability. Along with it, the course should cater to diversity (gender, race, caste etc.). The passing criteria for Diversity & Inclusion is higher than other categories as this form one of the key pillars of the overall culture being inculcated with the government

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The detailed questionnaire is provided in Annexure II & Annexure III. While Sustainability questionnaire (Annexure IV) is not a part of overall course quality framework, it is highly recommendable that every course reviewer should evaluate the course from a sustainability lens using the questionnaire and ensure that the content meets all the criteria mentioned.

Each of the six categories in the Quality Scorecard has been attributed **Weightages** based on their importance in the learner's **'learning journey'** with focus on building competencies, along with the content creator's capability to design the course targeting the competencies. The weighted average approach is adopted to emphasise that some categories contribute more than other in determining the quality of a 'Good Course Design', instead of, each category contributing equally to the final average score.

To emphasise further a **'Minimum Score'** has been determined to be achieved by the course creator in each category. This Minimum Score is to ensure that each course need to follow a minimal acceptable limit within each of the category.

The following 'Weightages' and 'Minimum Score' has been proposed to be assigned to the six (6) categories:

Categories	**WEIGHTAGE**	**MINIMUM SCORE**
Instructional Method	25%	50%
Assessment Design	20%	50%
Competency and Skills	20%	50%
Diversity & Inclusion	15%	60%
Learner Engagement	15%	50%
Learner Support	5%	50%

CCs while 'self-evaluation' and Expert Reviewers during 'Review', will be scoring on a Four (4) point scale of Strongly Disagree (0), Disagree (1), Agree (3) and Strongly Agree (5). The 'weighted average' of the 'total score' achieved will be seen as 'percentage' of the 'maximum score' that can be attained. This will determine the 'Composite Score' for the course. The 'Composite Score' will be evaluated against the 'Minimum Qualifier'. The 'Minimum Qualifier' for a course to qualify to 'Go-Live' on iGOT has been determined as **70%**. This proposed methodology will enable the system to identify the good courses along with highlighting the categories wherein the content creator performed well and vice versa. This will help in providing necessary feedback to the content creator to work on improvement areas, in case, they fail to achieve the Minimum Qualifier.

Based on the scoring pattern, the CC will be graded based on the following rate card. However, if the course does not meet the minimum proposed score for any of the category then it will be graded as "iGOT Toddler":

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Grades	Average Composite Score	Colour Band	Definition
iGOT Toddler	Below 60	Red	Needs a lot of improvement to meet the 'Qualified' standard
iGOT Friendly	60 to 70	Orange	Needs a little improvement to meet the 'Qualified' standard
iGOT Qualified	70 and above	Green	Met the minimum score of 70
iGOT Qualified courses may be star rated depending on their average composite score as below:			
iGOT *	70 to 80	Green	
iGOT **	81 to 89	Green	
iGOT ***	90 to 95	Green	
iGOT ****	Above 95	Green	
iGOT *****	100	Green	

3.2 Feedback from Learner

The Learner Survey – This is an evaluation instrument administered to learners at course/program completion, which includes a Net Promoter Score (NPS) question. The Learner Survey includes a 4-point Likert scale question at the category level from the iGOT Quality Scorecard.

The survey also includes a Net Promoter Score (NPS) question. NPS is a proven metric that provides core measurement for customer experience (learner experience, in the case of iGOT) programs around the world.

In addition to the Category and NPS questions, there are two qualitative questions on what the course/program does well and where improvements are needed.

The **Behavioural Survey** – This is a short questionnaire administered to learners and/or their supervisors at the end of 6 months of completing a program or course to gauge the extent of competency growth.

Trust Score

The **Trust Score** is a tiering system for content creator/provider and is the variance between content creator/provider self-rating and Learner score. Learner score will be achieved through an aggregation of the score by the learners through the learner survey along with performance metrics of the score on iGOT (as in completion rate, passing rate, etc). This will help to determine if the Course is effective with emphasis on how the learners have scored the course vis-à-vis the content creator/provider.

Each component of scores provided by User/Learner through Learner Survey, NPS and the consolidated score of performance metrics will be scored on a 3-point scale defined in bands of High (Above 70%), Average (50-70%) and Low (Below 50%). The score so obtained will be normalised to a percentage to obtain consolidated user score (CUS). The CUS will be used

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to check for variance of the CCs Self Evaluation/Expert Review score obtained before going live on iGOT. The variance between these two scores will be tracked for 'TRUST Score" based on the following banding:

HIGH TRUST Score	Variance <5%
AVERAGE TRUST Score	Variance >5%<10%
LOW TRUST Score	Variance more than 10%

Each content provider will start with a trust score of 100, based on category of trust score for each course being uploaded the total score for content creator/provider will increase decrease or remain constant as below:

- In case of course getting High trust score, increase cumulative trust score by 5 points for CC
- In case of course getting Average trust score, make no change to cumulative trust score for CC
- In case of course getting Low trust score, decrease cumulative trust score by 5 points

The trust score would need to be evaluated on continuous basis and appropriate intervention taken as per below condition:

- If trust score falls below 85 or a cumulative of 3 Low Trust score for courses uploaded by a content creator/provider is reached – a discussion between content creator and content PMU team needs to take place to deep dive into problem areas and develop an overall improvement plan
- If the trust score for any content provider falls below 70 or a cumulative of 8 Low Trust score for courses uploaded is reached – the contract for content creator should be re-evaluated

3.3 Course Quality process

The following is a diagrammatic representation of how the iGOT Quality Assurance Process will work.

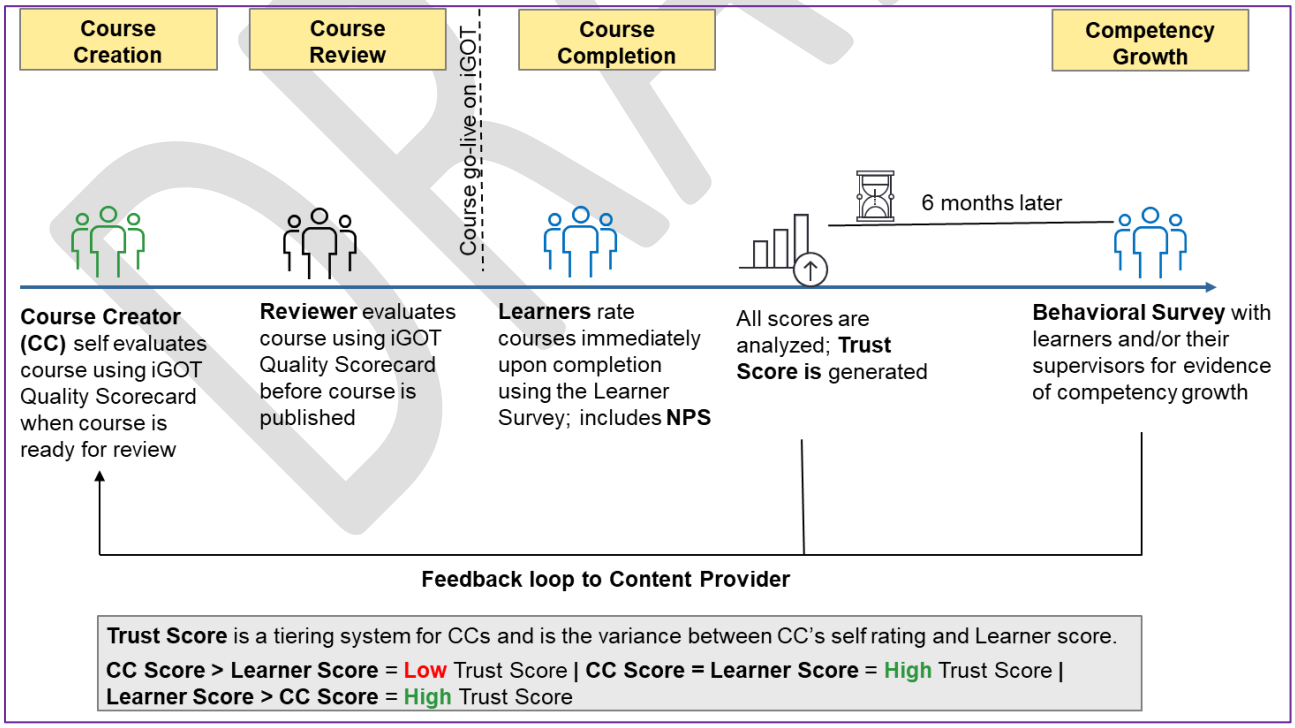


Figure 6 The Proposed iGOT Quality Assurance Process

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Here is a look at some of the proposed rules that govern the functioning of the iGOT Quality Assurance Process:

- The set passing threshold for both CC evaluation as well as Reviewer is 70%.
- For a course to go live on iGOT, Reviewer score must be equal to or higher than 70%.
- If Reviewer score is below 70%, the course will **NOT** go live on iGOT.
- The **Learner Survey** will contain evaluation of categories from the iGOT Quality Scorecard as well as the Net Promoter Score (NPS) question and qualitative feedback.
- Key platform metrics, such as completion, popularity (Shares, Likes), etc., will be reported along with Learner scores.
- **Trust Scores** for the CC will be based on the variance between CC's self rating and the Learner score.
    - ✓ CC Score > Learner Score = Low Trust Score
    - ✓ CC Score = Learner Score = High Trust Score
    - ✓ Learner Score > CC Score = High Trust Score
- The score from the **Behavioral Survey** will also add to (or subtract from as the case may be) the Trust Score for the CC
- If the Trust score for a CC falls below 70% then they should be re-evaluated

This **proposed methodology considers the input from several meetings** with the iGOT Steering Committee as well as global agencies with deep expertise in the areas of **Human centred design** and courseware design and development. The following are a few of the notable recommendations that the proposed methodology includes:

- For scale, CPs must rate their offerings according to a standardised prescribed model.
- Users must have a say in the course effectiveness ratings.
- The ratings must fulfil a larger purpose, e.g. fuel the continuous improvement of courseware quality and inculcation of Human-Centred Design thinking in the CP community.
- There should be a provision for tracking competency growth among users as a result of completing courses / programs on iGOT

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4 Support for Content Creator

It is essential that content creator be provided with the right set of support on the platform to help them curate content as per the framework laid out and help them succeed in designing a high-quality content on the platform. Some of the suggested mechanism to be put in place are listed down below:

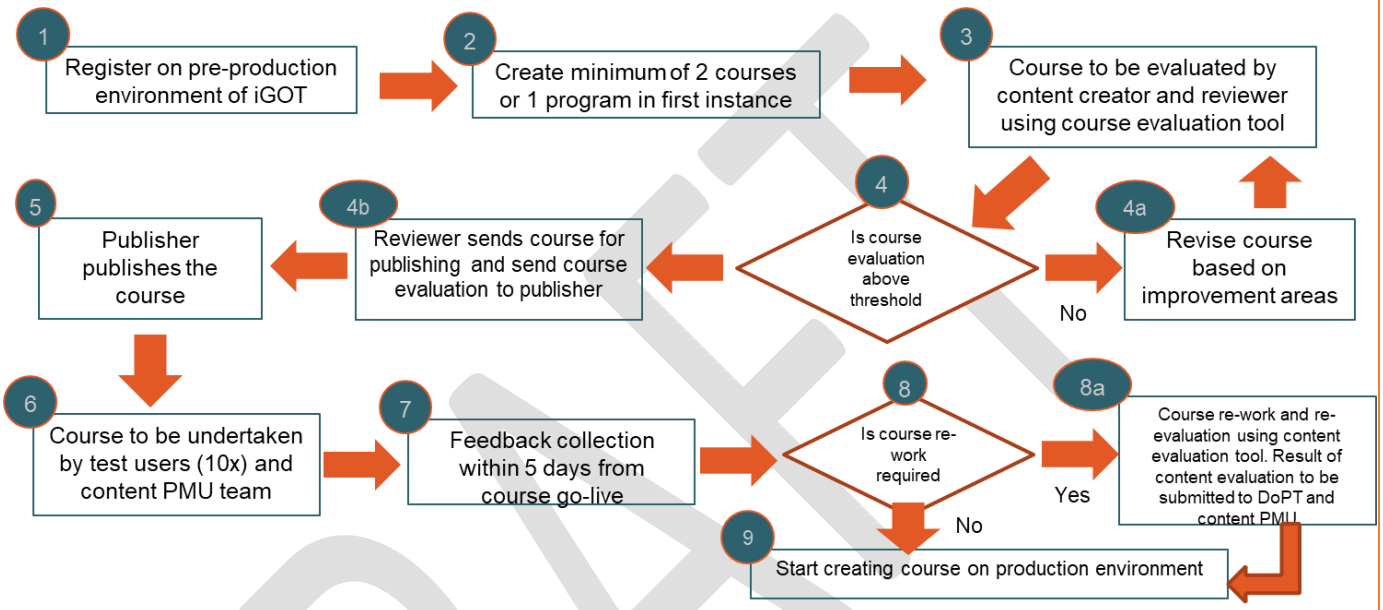
- Recommended on-line learning for all content curator on the content framework proposed (WTDE-T) and human centred design. These online courses should be made available on iGOT platform and may be completed by the curator before the start creating course
- On-line learning resource on usage of iGOT which explains the various features and their usage to content creator
- Detailed feedback to be incorporated by reviewer in case a course is rejected by reviewer due to threshold level not being cleared
- Feedback session with content team of iGOT SPV with the content provider in-case three consecutive courses record low trust score
- Annual seminar/workshop with all content creator, technology experts of iGOT, Subject Matter Experts, Content team from SPV and DoPT representatives
- Content guidelines to be developed and given to all content creator at the time of on-boarding. Guideline should provide the must-do, style guide etc. for the content creator

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5 Content curation process

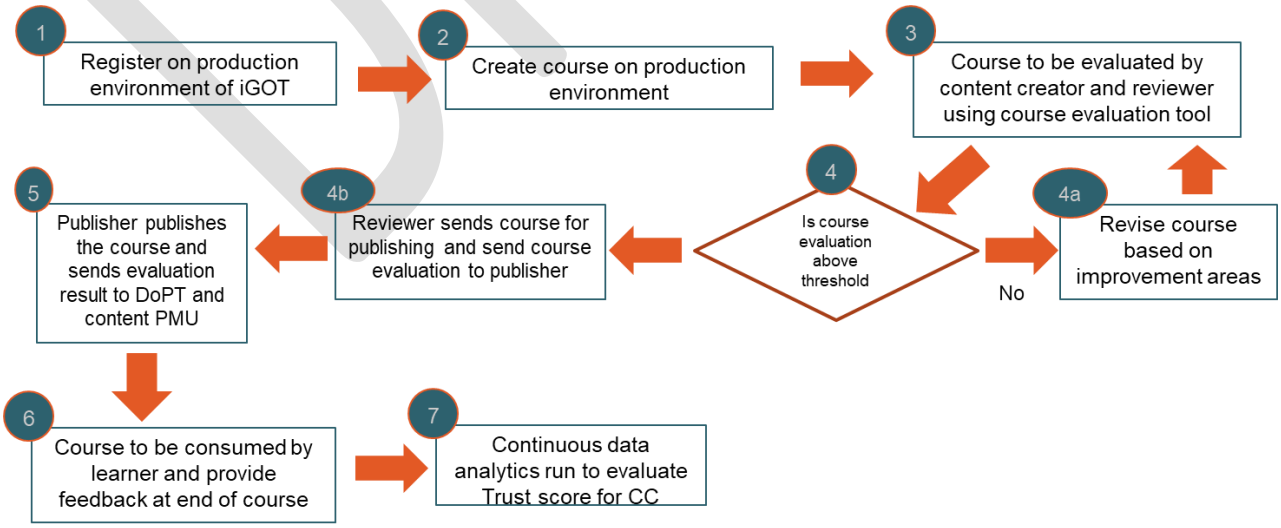
5.1 One-time process for first time content curation

For the first time content creator it is essential that they become used to the platform and the overall content creation process before starting to publish courses for the end user. Hence it is proposed to practice onboarding of minimum of 2 courses on pre-production environment before starting to curate courses on production environment. Below diagram showcases the steps to be followed by content curator for first time curation:



5.2 Process for regular content creation

To make sure that the highest quality content is being uploaded on the platform. All content curator needs to follow the content curation guideline. To ensure the same, following steps are supposed to be followed by the content curation department/ministry/institute



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Annexure I: Gate Criteria - Mandatory Requirement

I, <Name of authorised individual representing the CBP Provider>, have registered with the Competency Building Commission (CBC), and completed the Uploading Content on iGOT course. Thus, I hereby certify that <CBP name> fulfils the following criteria, as espoused in the Content Guidelines for iGOT Karmayogi.

Sl. No.	Criteria	Response
1	Content does not contain hate speech, abuse, violence and profanity.	☐Yes ☐ No
2	There is no sexual content, nudity or vulgarity in the course being developed.	☐Yes ☐ No
3	There is no defamation of any institution or individual as part of the course.	☐Yes ☐ No
4	Content is appropriate for all users on the platform and do not hurt sentiments of any race, caste, religion or gender.	☐Yes ☐ No
5	All maps, borders and historical figures have been appropriately and accurately represented. (this should have a Not Applicable option as well)	☐Yes ☐ No
6	Content does not contain any copyright violation.	☐Yes ☐ No
7	Content is devoid of plagiarism and a plagiarism certificate is attached with this documentation.	☐Yes ☐ No
8	All sources – online or printed materials – have been duly credited. A list of references is maintained at the end of each module.	☐Yes ☐ No
9	The course is tagged to one or more competencies that it addresses.	☐Yes ☐ No

Name of Authorised Signatory:

Designation with Institution Name:

Annexure II: iGOT Karmayogi Course Quality

Instructional Methods: Instructional methods determine how effectively the stated competencies are acquired.

Sl. No.	Statement	Option
1	A clear learning pathway is defined, and learners are able to track their journey (E.g. a menu of topics and subtopics indicates what the learner has finished and how much is remaining within the course).	☐Yes ☐ No
2	Each learning session (module) contains at-least one 'Watch' element as defined in the WTDET content framework.	☐Yes ☐ No
3	Each learning session (module) contains at-least one 'Think' element as defined in the WTDET content framework.	☐Yes ☐ No
4	Each learning session (module) contains at-least one 'Do' element as defined in the WTDET content framework.	☐Yes ☐ No
5	Each learning session (module) contains at-least one 'Explore' element as defined in the WTDET content framework.	☐Yes ☐ No
6	The course introduction is included as part of the course and states the learning objective and intended audience at the beginning of the course	☐Yes ☐ No
7	Module-level learning objectives are stated clearly and align with the overall course goals.	☐Yes ☐ No
8	The course employs a variety of multimedia tools as necessary, appropriate to the content and target group.	☐Yes ☐ No
9	There are practice reinforcement questions after approximately every 7 screens.	☐Yes ☐ No
10	All practice activities (Think elements) provide diagnostic feedback. i.e. In case a user attempts the question incorrectly/correctly, it provides them with a descriptive feedback	☐Yes ☐ No
11	There is at least one active learning activity, such as online discussion/ debate, group project, synchronous online meeting, case study or a learning game per CBP.	☐Yes ☐ No
12	The language used in the course is understandable by the target audience.	☐Yes ☐ No
13	Learners are given examples of and asked to explore practical applications of the course in their setting.	☐Yes ☐ No

Assessment Design: Good assessment design includes testing readiness of target competencies.

Sl. No.	Statement	Option
1	The course features a post-assessment with clear instructions on evaluation.	☐Yes ☐ No
2	Passing criteria is clearly stated for the assessment.	☐Yes ☐ No
3	The learning activities and assessment are consistent with learning outcome	☐Yes ☐ No
3	Answer options for multiple choice questions, or distractors, are realistic, i.e. learners cannot guess the correct answer by easily eliminating incorrect ones. There should be only one correct answer to MCQs, and that explanations are provided for each right and wrong answer.	☐Yes ☐ No
4	The assessment uses understandable language and terms.	☐Yes ☐ No
5	Case studies and case-oriented assessment questions are based on real-life situations.	☐Yes ☐ No
6	The assessment uses more than one format of questions.	☐Yes ☐ No
7	The course avoids True/False questions.	☐Yes ☐ No
8	The assessment avoids "All of the above" and/or "None of the above" answers. (*They call attention to themselves and are often correct!*)	☐Yes ☐ No

Competency: The course helps learners achieve the stated competency goals.

Sl. No.	Statement	Option
1	Target competencies are clearly stated at the beginning of the course.	☐Yes ☐ No
2	All target competencies are clearly tested at the end of the course to demonstrate progression.	☐Yes ☐ No
3	Target competencies have been covered in the course using real-life scenarios.	☐Yes ☐ No

Learner Engagement: These include techniques to deepen learner engagement with the learning material.

Sl. No.	Statement	Option
1	Resources are byte sized (6-10 minutes long).	☐Yes ☐ No
2	The technical quality of all media is good, i.e. videos and audios play with no distortion.	☐Yes ☐ No
3	Reading content (e.g. PDF, slides) is designed for on-the-go consumption and contains visual summaries, infographics and other similar techniques.	☐Yes ☐ No
4	The voice over accent is one that can be easily understood by the target audience.	☐Yes ☐ No
5	Web links used in the course are relevant and functional.	☐Yes ☐ No
6	The voice used is not machine simulated and robotic. (Please make this a separate point)	☐Yes ☐ No

Learner Support: Resources included with the course extend learning and enhance the asynchronous learning experience.

Sl. No.	Statement	Option
1	Learners are able to download courses and complete in offline mode (e.g. Course avoids using YouTube links/ external to videos).	☐Yes ☐ No
2	Learners have access to additional resources that enrich the course content.	☐Yes ☐ No
3	Learners have access to troubleshooting resource(s) and contact details.	☐Yes ☐ No
4	The course features navigational help.	☐Yes ☐ No
5	The course contains a list of abbreviations used and a glossary of terms as part of each module.	☐Yes ☐ No

Annexure III: Diversity & Inclusion

Diversity & Inclusion: The course uses language and media elements that are inclusive and feature diversity in gender, race and religion. The course is accessible to differently abled learners.

Sl. No.	Statement	Option
1	All graphical elements (image, graphics, shapes, charts etc.) used in the course include descriptive 'alt tags' that screen readers read out in descriptions.	☐Yes ☐No ☐ N/A
2	Videos feature closed captions and transcripts.	☐Yes ☐No ☐ N/A
3	Hyperlinks in the course connect to the correct location and all of them are descriptively titled (not using phrases as “Click here”), underlined, and a different colour.	☐Yes ☐No ☐ N/A
4	Course provides alternative activities to replace drag-and-drop ones by using a matching activity with typing the correct number or letter.	☐Yes ☐No ☐ N/A
5	Course uses appropriate font size and type, which is adjustable and conforms to all the required standards. (Please refer to document for standards).	☐Yes ☐No ☐ N/A
6	The course uses both colour and symbols to convey messages or visual notifications.	☐Yes ☐No ☐ N/A
7	The course uses patterns and textures as opposed to only contrasting colours for elements that require emphasis.	☐Yes ☐No ☐ N/A
8	Colour schemes used are colour-blind-friendly (Please see W3C standards) and contrast is used in choosing colour combinations.	☐Yes ☐No ☐ N/A
9	PDFs are saved as searchable text not images.	☐Yes ☐No ☐ N/A
10	Audio narration is available for static content.	☐Yes ☐No ☐ N/A
Diversity		
11	The course features diversity in gender	☐Yes ☐No ☐ N/A
12	The course/content does not showcase disparity or discrimination among genders (male, female, third gender). The course is gender intentional/ gender transformative [6]	☐Yes ☐No ☐ N/A
13	The course uses language that is gender inclusive, e.g. use of 'they' in favour of 'he' (with appropriate change to sentence structures).	☐Yes ☐No ☐ N/A
Culture Diversity & Tolerance		
14	Courses developed are multilingual and available in multiple official languages.	☐Yes ☐No ☐ N/A

[6] https://www.gatesgenderequalitytoolbox.org/wp-content/uploads/BMGF-Gender-Guide.pdf

15	Human characters used in the course belong to the context that is being portrayed, e.g. use of Indian characters in Indian contexts and situations and use of international characters where the situation demands.	☐Yes ☐No ☐ N/A

Annexure IV: Sustainable Development

This section will be part of the initial completed checklist from Content Providers, and not a measure of course quality.

Sl. No.	Statement	Option
Environmental Sustainability		
1	The course portrays conservation of the integrity of ecosystems and biodiversity, promotes sustainable management and use of natural resources.	☐Yes ☐No ☐ N/A
2	The course addresses the risk of climate change impact and disasters, integrates climate change adaptation considerations and does not exacerbate vulnerability of communities to climate change impacts or disaster risks.	☐Yes ☐No ☐ N/A
3	The course does not promote practices related to increased pollution, use of unsound chemicals, improper waste management, especially with respect to plastic waste, hazardous wastes, organic & ozone depleting pollutants.	☐Yes ☐No ☐ N/A
Sustainable consumption and production		
4	The course promotes sustainable and efficient use of resources (energy, land and water).	☐Yes ☐No ☐ N/A
5	The course advocates responsible and sustainable lifestyles, including Green Economy and Green Jobs.	☐Yes ☐No ☐ N/A
6	The course does not portray harming living beings (humans, animals or plants) with the intent to benefit from such practices.	☐Yes ☐No ☐ N/A
Peace and Non-Violence		
7	The course does not promote forced labour, armed conflicts, delocalization and migration, displacement and involuntary settlement.	☐Yes ☐No ☐ N/A
8	The course promotes friendly relations among nations, peaceful solutions, living together.	☐Yes ☐No ☐ N/A
9	The course does not promote/advance forms of violence including bullying, verbal abuse, gender-based violence and extremism.	☐Yes ☐No ☐ N/A
Human Rights and Gender Equality		

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10	The course promotes/advances equality, inclusion and non-discrimination, for example by gender, caste, race, class, disability.	☐Yes ☐No ☐ N/A
11	The course does not include working children under the legal age of 18 years.	☐Yes ☐No ☐ N/A
12	The course does not breach any provisions with respect to national employment, labour laws and international commitments.	☐Yes ☐No ☐ N/A
Human Survival and Well-being		
13	The course promotes occupation health and safety standards with special focus on women workers, young workers, migrant workers and workers with disabilities.	☐Yes ☐No ☐ N/A
14	The course advocates sustainable cities, communities and health of the planet for future generations.	☐Yes ☐No ☐ N/A
Culture Diversity & Tolerance		
15	The course does not adversely affect International or intercultural understanding, solidarity and cooperation.	☐Yes ☐No ☐ N/A
16	The course recognizes, respects, protects and preserve indigenous people's culture, knowledge and practices.	☐Yes ☐No ☐ N/A

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Annexure V: Learner Survey

All questions must be scored on the following Scale:

Strong Disagree Disagree Agree Strongly Agree

Q1. The instructional methods used to teach this course / program were effective.

Q2. I had to apply myself and stretch my abilities to do well in the assessment.

Q3. I believe the course or program is designed keeping competency development and skill acquisition in mind.

Q4. I was deeply engaged with the learning materials and the examples and case studies used in the course or program.

Q5. The learner support materials in the course were effective

Q6. The course or program supported the needs to differently-abled learners, although I might not have used those features

Q7. On a scale of zero to ten, how likely are you to recommend this course or program to a friend or colleague?

Below questions are descriptive questions to be asked by learner

Q8. What was especially noteworthy about this course or program? (2-3 short bullets)

Q9. What improvements would you recommend to the course or program? (2-3 short bullets)

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Annexure VI: Behavioural Survey

All questions must be scored on the following Scale:

Strong Disagree Disagree Agree Strongly Agree

Q1. Knowledge and skills acquired as a result of completing the course was utilised on the job.

Q2. There is a positive change in on-the-job behavior

Q3. The change in behavior is sustained over time

Q4. There is a noticeable and measurable improvement in the activity and performance on the job.

Q5. Other people in the organisation are being trained on new knowledge, skills and attitudes.

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