



# Developing a LMS for Implementing Competency-based Learning Management

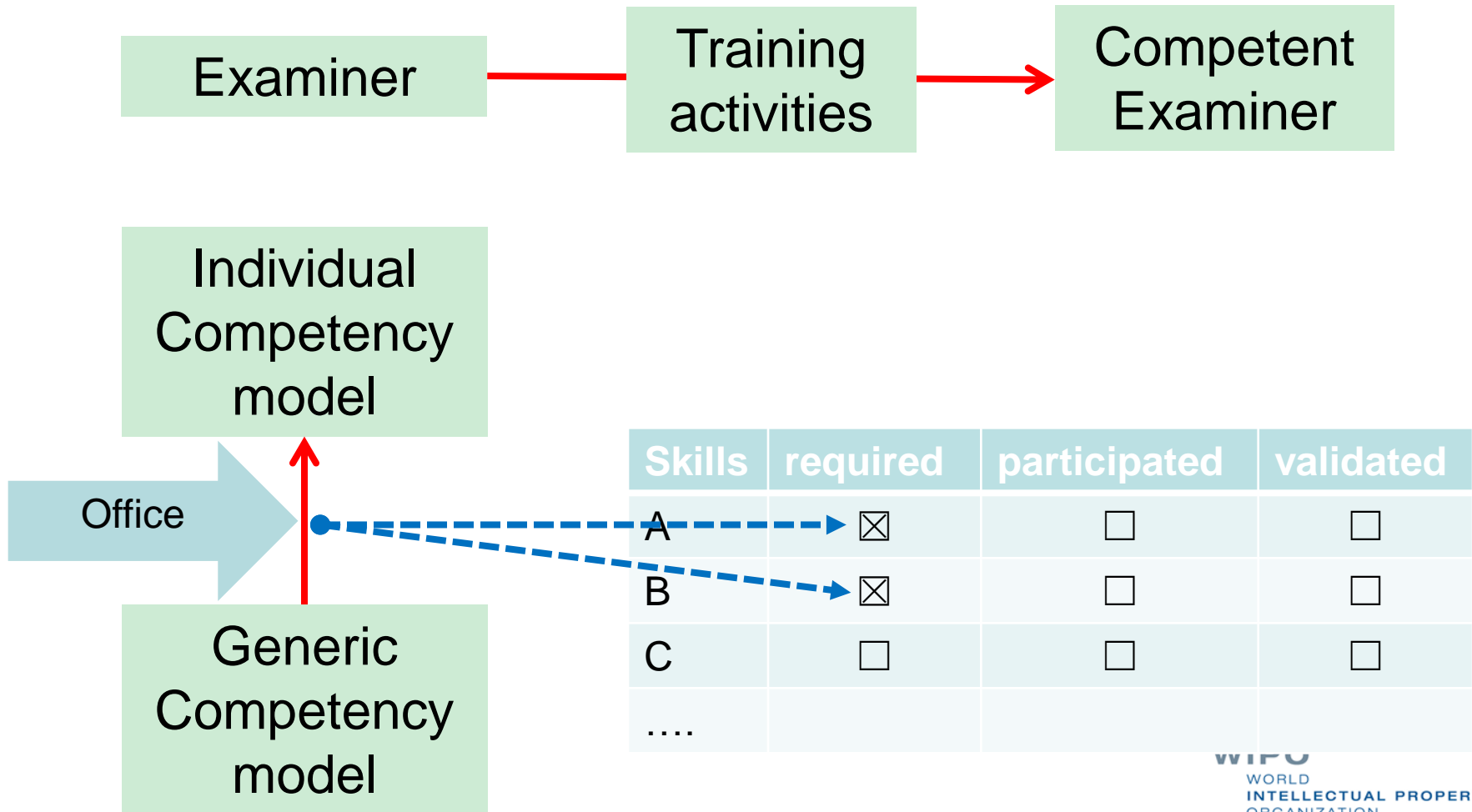
Sofia Rehan Ramli

ICS, International Cooperation on Examination and Training  
Section, WIPO; and Patent Examiner, MyIPO

# Defining individual competency model

- Competencies – skills, knowledge, and abilities required to perform effectively at a position held in a certain industry or field
- A competency-based training approach gives employees an understanding of what skills and knowledge are needed for their job and where exactly they are on a training track

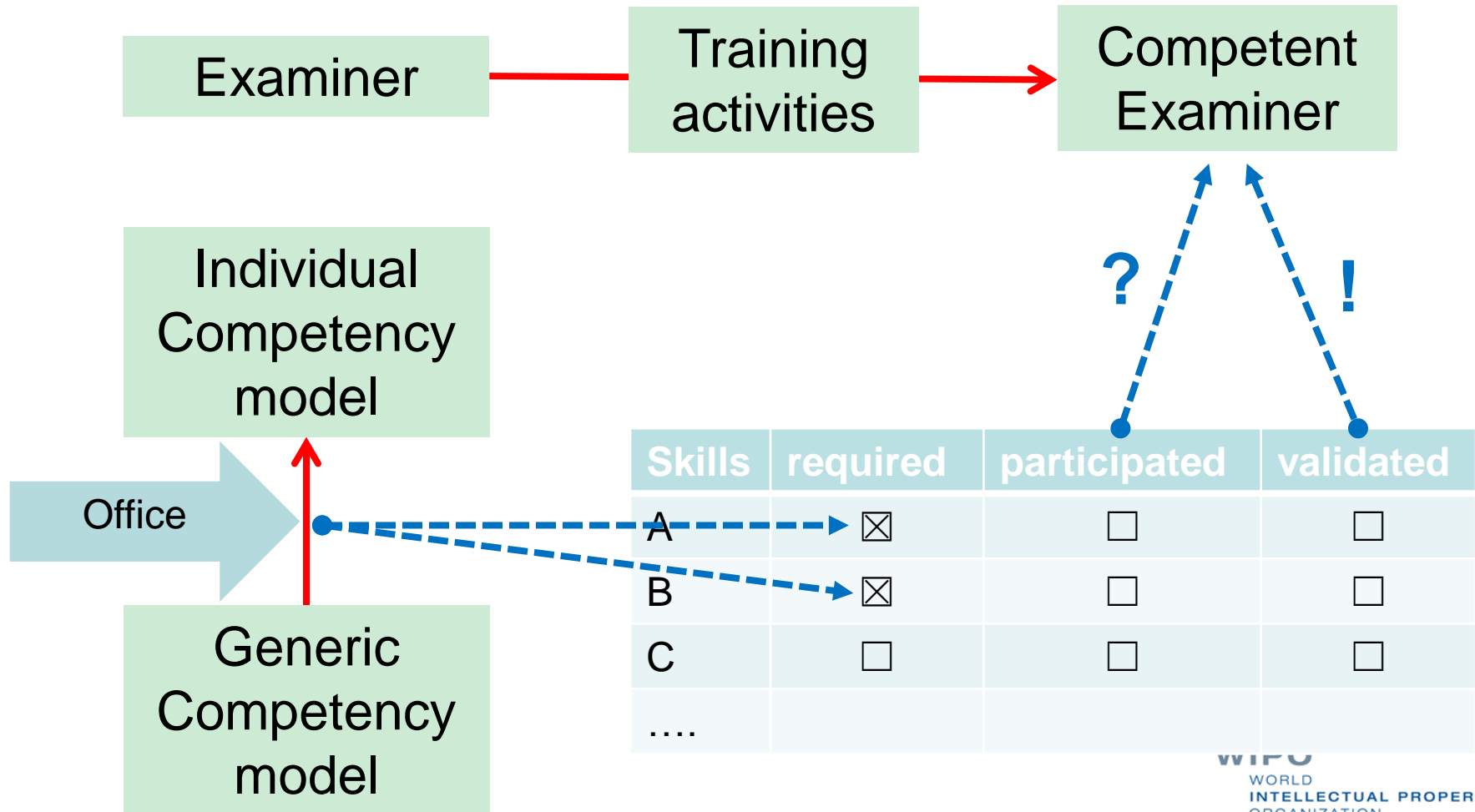
# Defining individual competency model



# LMS in Training of Patent Examiner

- Every patent examiner must acquire a certain set of competencies to become an efficient / competent patent examiner
- Learning activities (e.g. courses, trainings) can be connected to relevant competencies and thus be assigned to a specific patent examiner
- The next step in the competency-based training approach is to develop an ‘individual learning plan’
  - complete with a curriculum, progress monitoring, and results evaluation by means of specific performance indicators

# Learning Management System (LMS): recording and tracking



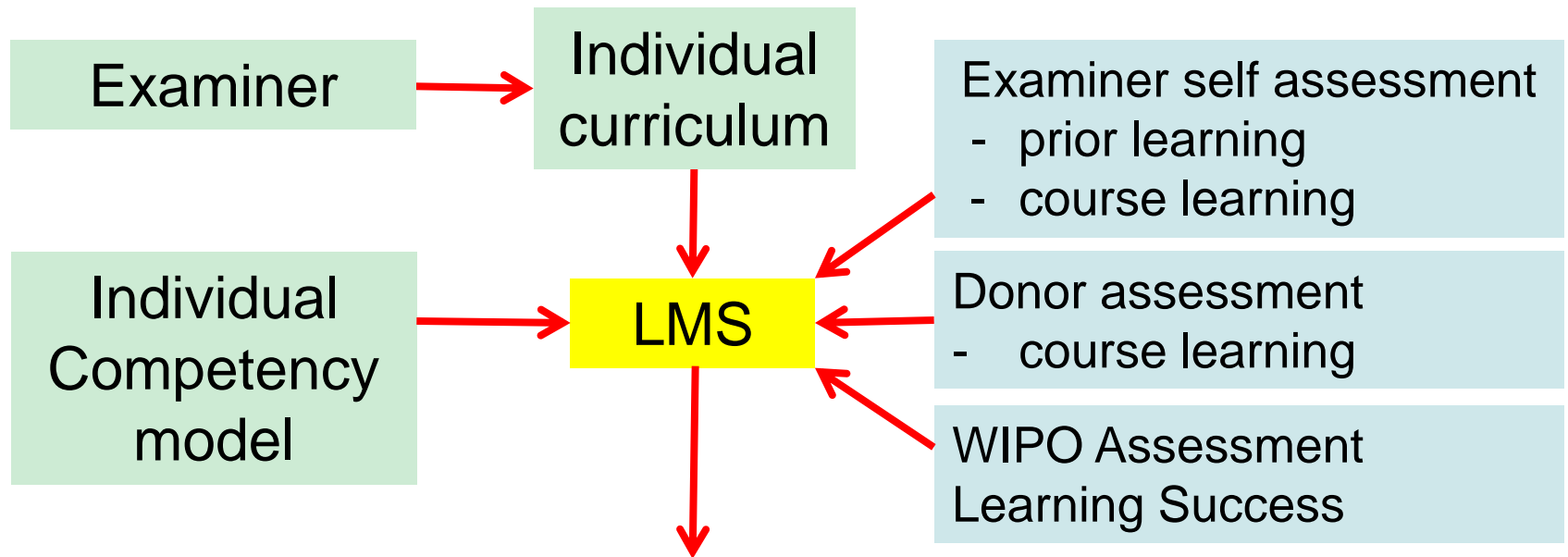
# LMS in Training of Patent Examiner: advantages

- For manager/administrator:
  - A one-stop center not only for managing examiner's knowledge but bringing it in line with the actual needs of the Office, thereby increasing job efficiency
  
- For examiner:
  - Can initiate the competencies-based training by himself / herself
  
- For WIPO:
  - For the management of examiner training activities organized or co-organized by the International Bureau, and for monitoring training progress of any participant in such training activity
  - Assure a comprehensive training of an enrolled examiner and efficient use of training activities and resources

# LMS in Training of Patent Examiner

- LMS allows for:
  - A chance to monitor and measure results
  - A detailed reporting system
  - Trouble-free training materials delivery
  - Training process automation
    - Prioritization of participation
  - Training cost reduction
  - Retention of qualified personnel

# Tracking Learning Progress



Skills	required	participated	validated
A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
....			



## Community driven, globally supported.

Welcome to the Moodle community and discover the value of an open, collaborative effort by one of the largest open-source teams in the world.

[COMMUNITY FORUMS](#)



Supported by a global community



Robust open-source learning platform



Powering learning environments worldwide



Moodle stories from around the world

## Announcements



[See all announcements](#) »

Moodle 3.4 is released!

Monday, November 13, 2017

Helpdesk Support needed at Moodle HQ

Monday, November 13, 2017

Moodle 3.3.3, 3.2.6 and 3.1.9 are now available

Monday, November 13, 2017



# Individualized and Competency based Patent Examiner Training Management

## WELCOME

This is a test site for implementing the individualized and competency based patent examiner training management

## COURSE CATEGORIES

- Recognition of Prior Learning
- Distance Learning
- Miscellaneous
- All courses ...

## NAVIGATION

- Home
- Site announcements
- Welcome
- Courses



## Site announcements

(No announcements have been posted yet.)

## LOGIN

Username

Password

Remember username

[Lost password?](#)



# Admin User

[Dashboard](#) ▶ [Profile](#)

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## NAVIGATION



### Dashboard

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## ADMINISTRATION



### Site administration

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- ⚙ [Advanced features](#)
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  - ▶ [Competencies](#)
  - ▶ [Badges](#)
  - ▶ [Location](#)
  - ▶ [Language](#)

## User details

[Edit profile](#)

### Email address

[sofiarehan@gmail.com](mailto:sofiarehan@gmail.com)

## Miscellaneous

- [Blog entries](#)
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## Reports

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## Login activity

### First access to site

Wednesday, 11 October 2017, 4:34 PM (41 days 20 hours)

### Last access to site

Wednesday, 22 November 2017, 11:57 AM (2 secs)

# Competency Frameworks

Training Management Admin User

## Competencies

Dashboard ▶ Site administration ▶ Competencies ▶ Competency frameworks

### NAVIGATION

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  - Site pages
  - Courses

### ADMINISTRATION

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    - Grades
    - Competencies
    - Competencies settings
    - Migrate frameworks
    - Import competency framework
    - Export competency framework

## Competency frameworks

Add new competency framework

Competency frameworks repository

### List of competency frameworks

Name	Competencies	Category	Actions
Training for Patent Examiners (T1.0)	101	System	Edit ▾



Dashboard

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Competencies

- Competencies settings
- Migrate frameworks
- Import competency framework
- Export competency framework
- Competency frameworks**
- Learning plan templates

- Badges
- Location
- Language
- Plugins

# Training for Patent Examiners

## Competencies

- Training for Patent Examiners
  - Intellectual Property and Patent Examination
    - Nature and function of IP rights
      - Understanding the differences between various IP Rights
      - Understanding the commercial implications of holding an IP Right
      - Understanding the consequences of examination outcomes
    - Function of international and national IP offices
    - Laws, treaties and conventions governing international and national patent systems
    - Function and processes of patent examination and the role of patent examiners
    - Construe Patent Specifications
      - Interpretation of specifications in

**Selected competency**

No competency selected



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  - Import competency framework
  - Export competency framework
  - Competency frameworks
  - Learning plan templates**
- Badges
- Location
- Language
- Plugins
- Security

## Learning plan templates

Add new learning plan template



### List of learning plan templates

Name	Category	Cohorts	Learning plans	Actions
Introduction to Intellectual Property	System	0	1	Edit
Patent Examination for Beginners	System	0	0	Edit



### NAVIGATION



#### Dashboard

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### ADMINISTRATION



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  - Learning plan templates**
- Badges
- Location
- Language

## Introduction to Intellectual Property #

Intellectual Property in General

Add competencies to learning plan template



### Learning plan template competencies

0 out of 1 competencies linked to courses

0.0 %

0 out of 1 learning plans completed for this template

0.0 %

#### Nature and function of IP rights 1.1



Training for Patent Examiners - Competency

Path: Training for Patent Examiners / 1

Linked courses: No courses are linked to this competency

Manage competencies and frameworks



NAVIGATION

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Competency picker

Competency frameworks  
Training for Patent Examiners T1.0

Locate competency  
Search...

- Training for Patent Examiners
  - Intellectual Property and Patent Examination
  - Construe Patent Specifications
  - Evaluate Patent Specifications
  - Assess Novelty
  - Assess Inventive Step
  - Technology-Specific Examination
    - Classify Patent Applications
  - Work-Sharing
    - Utilizing Work-sharing**
  - Conduct Searches
  - Produce Examination Reports
  - Undertake Searches and Patent Examination under Supervision within a National Context
  - Independently Undertake Complex Searches and Examinations within a National Context
  - Supplementary

Add Cancel





# Individualized and Competency based Patent Examiner Training Management

Dashboard ▶ Site administration ▶ Competencies ▶ Learning plan templates

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    - Competencies settings
    - Migrate frameworks

## Learning plan templates

Add new learning plan template

### List of learning plan templates

Name	Category	Cohorts	Learning plans	Actions
Introduction to Intellectual Property	System	0	1	<a href="#">Edit</a>
Patent Examination for Beginners	System	0	0	



- Edit
- Duplicate
- Create learning plans**
- Add cohorts to sync
- Delete



# Management

Dashboard ▶ Site administration ▶ Competencies ▶ Learning plan templates ▶ Introduction to Intellectual Property ▶ Learning plans

## NAVIGATION



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## ADMINISTRATION



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  - Competencies settings
  - Migrate frameworks
  - Import competency framework
  - Export competency framework
  - Competency frameworks
  - Learning plan templates**

## Introduction to Intellectual Property

### Learning plans

Select users to create learning plans for

No selection



- Examiner AAA examiner.aaa@aaa.com
- Examiner BBB examiner.bbb@bbb.com
- Examiner CCC examiner.ccc@ccc.com
- Admin User sofiarehan@gmail.com
- Trainer XXX trainer.xxx@xxx.com
- Trainer ZZZ trainer.zzz@zzz.com

First name / Surname ▲

Email address

Admin User

sofiarehan@gmail.com



# Admin User

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## NAVIGATION



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## ADMINISTRATION



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Search

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Wednesday, 11 October 2017, 4:34 PM (41 days 21 hours)



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## Introduction to Intellectual Property

Intellectual Property in General

### Status

Active ([Complete this learning plan](#))

### Learning plan template

[Introduction to Intellectual Property](#) ([Unlink from learning plan template](#))

### Progress

1 out of 1 competencies are proficient

100.0 %

▶ [Comments \(0\)](#)

## Learning plan competencies

Name	Rating	Proficient	Status	Actions
<a href="#">Nature and function of IP rights 1.1</a> Path: <a href="#">Training for Patent Examiners / 1</a>	Competent	Yes	-	<a href="#">Edit</a> ▼



# WIPO Self-assessment of Individual Examiner Training Needs

Dashboard ▶ My courses ▶ Training Needs Self-assessment

## NAVIGATION



### Dashboard

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- My courses

### Training Needs Self-assessment

- Participants
- Badges
- Competencies
- Grades
- Questionnaire

Your progress

## Questionnaire

A self-assessment questionnaire for each participant.

- Announcements
- Patent Information
- Search Methodologies
- Patent Classification
- Substantive Examination Tasks
- Databases, Tools and Platforms for Patent Examination Tasks
- Technology-specific Training
- Other Training Needs
- Further Observations



# WIPO Self-assessment of Individual Examiner Training Needs

[Dashboard](#) ▶ [My courses](#) ▶ [Training Needs Self-assessment](#) ▶ [Questionnaire](#) ▶ [Patent Information](#) ▶ [Complete a feedback](#)

## NAVIGATION



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🔧 [Patent Information](#)

🔧 [Search Methodologies](#)

🔧 [Patent Classification](#)

🔧 [Substantive](#)

[Examination Tasks](#)

🔧 [Databases, Tools and Platforms for Patent Examinat...](#)

🔧 [Technology-specific Training](#)

🔧 [Other Training Needs](#)

## Patent Information

Mode: User's name will be logged and shown with answers

### Name and explain the different parts of a patent document\*

- (3) I am confident to do so
- (2) I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter
- (1) I have never had training on this matter

### Explain types and categories of claims\*

- (3) I am confident to do so
- (2) I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter
- (1) I have never had training on this matter

### Explain application, publication and priority numbers, their relation to each other and their formats\*

- (3) I am confident to do so
- (2) I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter
- (1) I have never had training on this matter



# WIPO Self-assessment of Individual Examiner Training Needs

Dashboard ▶ Courses ▶ Recognition of Prior Learning ▶ Training Needs Self-assessment ▶ Questionnaire ▶ Patent Information ▶ Analysis

## NAVIGATION

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Questionnaire

Announcements

**Patent Information**

Search

Methodologies

Patent Classification

Substantive Examination Tasks

Databases, Tools and Platforms for Patent Examinat...

Technology-specific

## Patent Information

Overview

Edit questions

Templates

**Analysis**

Show responses

Show non-respondents

Export to Excel



Submitted answers: 2

Questions: 9

### Name and explain the different parts of a patent document

Responses

(3) I am confident to do so

need some training to improve my skills and knowledge on this matter

Responses									
need some training to improve my skills and knowledge on this matter									

<b>Label</b>	<b>Question</b>	<b>Responses</b>			
	Name and explain the different parts of a patent document	I am confident to do so (3)	I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter (2)	I have never had training on this matter (1)	Average
		0	2	0	2
	Explain types and categories of claims	I am confident to do so (3)	I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter (2)	I have never had training on this matter (1)	Average
		2	0	0	3
	Explain application, publication and priority numbers, their relation to each other and their formats	I am confident to do so (3)	I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter (2)	I have never had training on this matter (1)	Average
		2	0	0	3
	Explain the different types of patent documents (publication stages) and the concept of kind codes	I am confident to do so (3)	I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter (2)	I have never had training on this matter (1)	Average
		0	1	1	1.5
	Determine the meaning of a given kind code	I am confident to do so (3)	I feel somehow confident to do so but may need some training to improve my skills and knowledge on this matter (2)	I have never had training on this matter (1)	Average
		0	0	0	0





## NAVIGATION

### Dashboard

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### Courses

- Recognition of Prior Learning
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      - Announcements
      - Patent Information**
      - Search Methodologies
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      - Databases, Tools and Platforms for Patent Examinat...
      - Technology-specific Training
      - Other Training Needs

## Patent Information

- Overview
- Edit questions
- Templates
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- Show responses**
- Show non-respondents

### Non anonymous entries (2)

Download table data as

User picture	First name / Surname	Date	Name and explain the different parts of a patent document	Explain types and categories of claims	Explain application, publication and priority numbers, their relation to each other and their formats	Explain the different types of patent documents (publication stages) and the concept of kind codes	Determine the meaning of a given kind code	Explain the concept of INID codes
	Examiner BBB	Wednesday, 22 November 2017, 5:03	I feel somehow confident to do so	I am confident to do so	I am confident to do so	I have never had training on this matter	I am confident to do so	I feel somehow confident to do so

# https://docs.moodle.org/34/en/Main\_page

Docs overview  ► Moodle Docs 3.4

3.4 docs ▼

main page

page comments

view source

history

Search



## Main page

### Get started

- Browse features
- Teacher quick guide
- Admin quick guide
- Installation quick guide

More quick guides >>

### Manage your course

- Set up your course
- Add students
- Track progress
- Upload files

More for teachers >>

### Add activities

- Use assignments to assess
- Discuss in forums
- Test students with a quiz
- Peer-assess with a workshop

More activities >>

### What's new

- For teachers
- For students

### Manage your site

- Add users
- Add courses

### Mobile app

- View app features
- Keep up-to-date with notifications

# LMS Network?

- Single Sign On (SSO) server authentication
  - Every trainee / participant as users of one Moodle

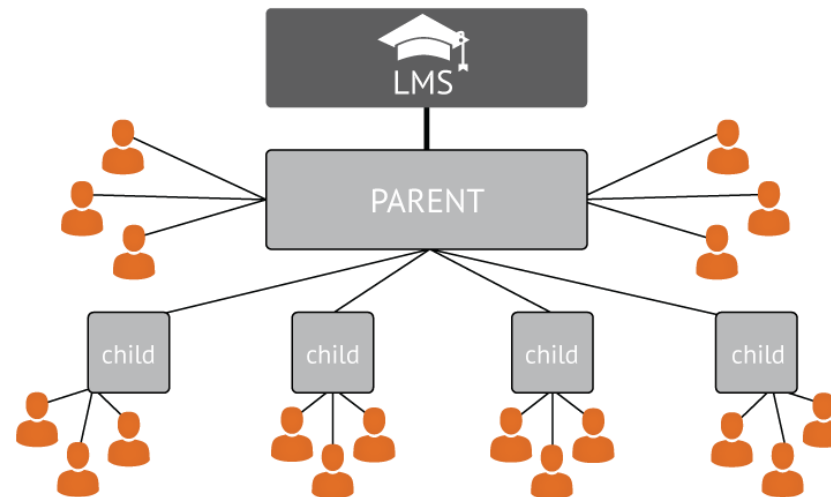
# LMS Network?

- Moodle Network (MNet)
  - Peer to Peer Network
  - a Moodle administrator to establish a link with another Moodle, and to share some resources with the users of that Moodle
  - OpenSSL certificate for encrypted communication with other Moodles, and will rotate encryption keys on a monthly basis (approx)

# LMS Network?

- Multi-tenant LMS

- Software-as-a-Service (SaaS) architecture



Thank you

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