



Technical Assistance for Improving ICT Competencies' Of Teachers In Remote Area Schools In Indonesia

Mobile Learning Week - UNESCO, Paris - 26 March 2018

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Center of Information, Communication and Technology for Education and Culture
Ministry of Education and Culture, Republic of Indonesia

PROGRAMME DESCRIPTION

1 ICT Literacy Training for Teachers

2 Online Learning Resources

3 Internet and ICT Equipments

PUSTEKKOM/ CENTER of ICT FOR EDUCATION AND CULTURE



INSTITUTIONAL INFORMATION

Pustekkom is one of the support system within the Ministry of Education and Culture that has the task to develop and utilize Information Communication and Technology in education and culture.

Pustekkom report its task directly to the Minister of Education and Culture.

(Ministerial Regulation number 11 Year 2015).

SCOPE OF THE WORK OF THE MINISTRY



Managing a **GIANT**



EDUCATION LANDSCAPE IN INDONESIA

Archipelago nation of

17,000 islands

5,150 km

Equivalent from NY to SFO

The Number

34 Provinces 512 District

Population:

260 million

(4th largest population in the world)

K-12 School

407 Thousand

K-12 Teacher

3.4 Million

K-12 Student

56 Million

K-12 Student Grade 1-6

37 Million

174,201 Schools

K-12 Student Grade 7-9

10 Million

56,674 Schools

K-12 Student Grade 10-12

9 Million

SMA : 22,005, SMK : 13,642

K-12 Number

59 M people in education

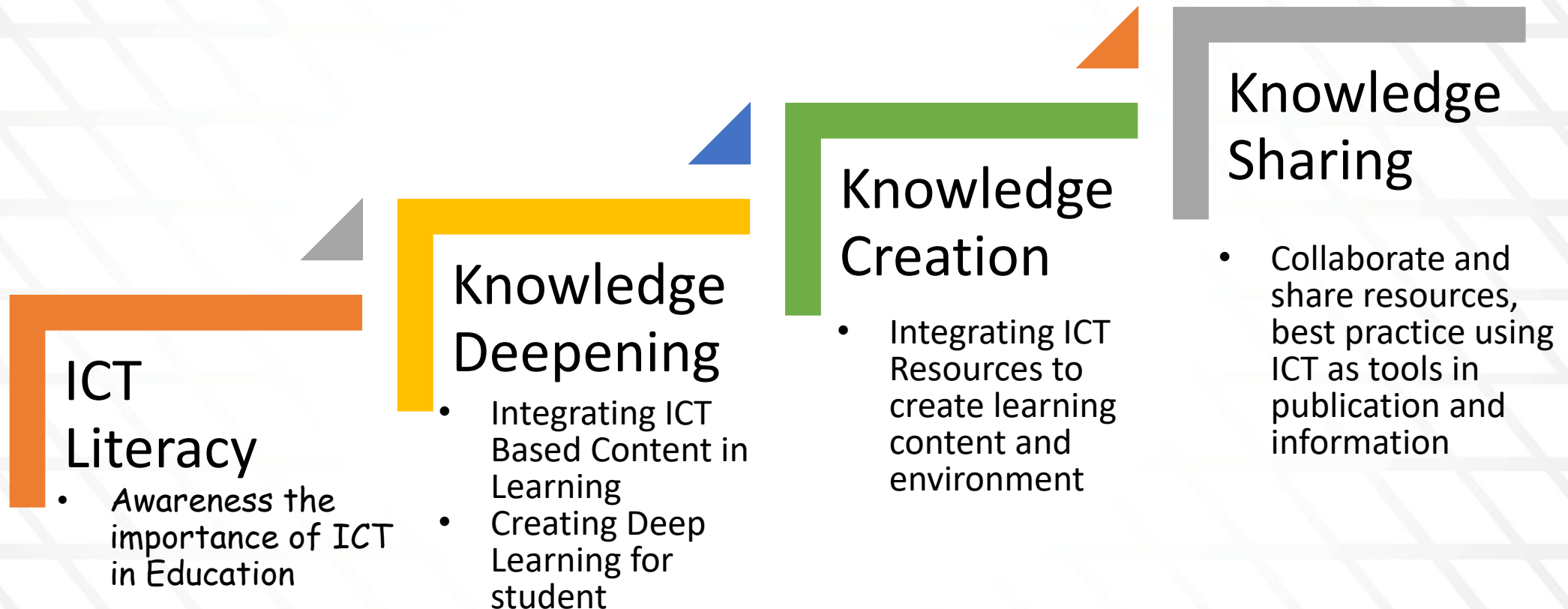
1. ICT Literacy Training for Teachers

ICT COMPETENCIES FOR TEACHERS

- Based on UNESCO ICT competency framework, Indonesia has already adopted and integrated the framework in Indonesian context.
- The ICT framework has been adjusted to fit with Indonesian Education system
- The framework starts with;
 - ICT literacy level to awaken the importance of ICT for education,
 - Knowledge Deepening to educate teacher integrating ICT in classroom,
 - Knowledge Creation to enhance ICT skills to produce content,
 - Knowledge sharing to foster collaboration among teacher.

ICT Competencies Standards for Teachers

Indonesia has adopted and integrated UNESCO ICT competency framework for teachers.



Source : ICT for Education, Republic of Indonesia

Description of Training

1. Introduction to multimedia devices
2. Introduction to ICT for education softwares/applications (email, docs, slides, sheets)
3. Introduction to **Rumah Belajar – Learning House** (Online Learning Resources)
4. Using Internet for learning by Enrolling in Online training
5. Developing ICT based multimedia for teaching

2. Online Learning Resources

One Stop Online Learning Resources



Learning House Portal is One Stop Service for teachers, students and the general public to get e-learning services based on multimedia and elearning.

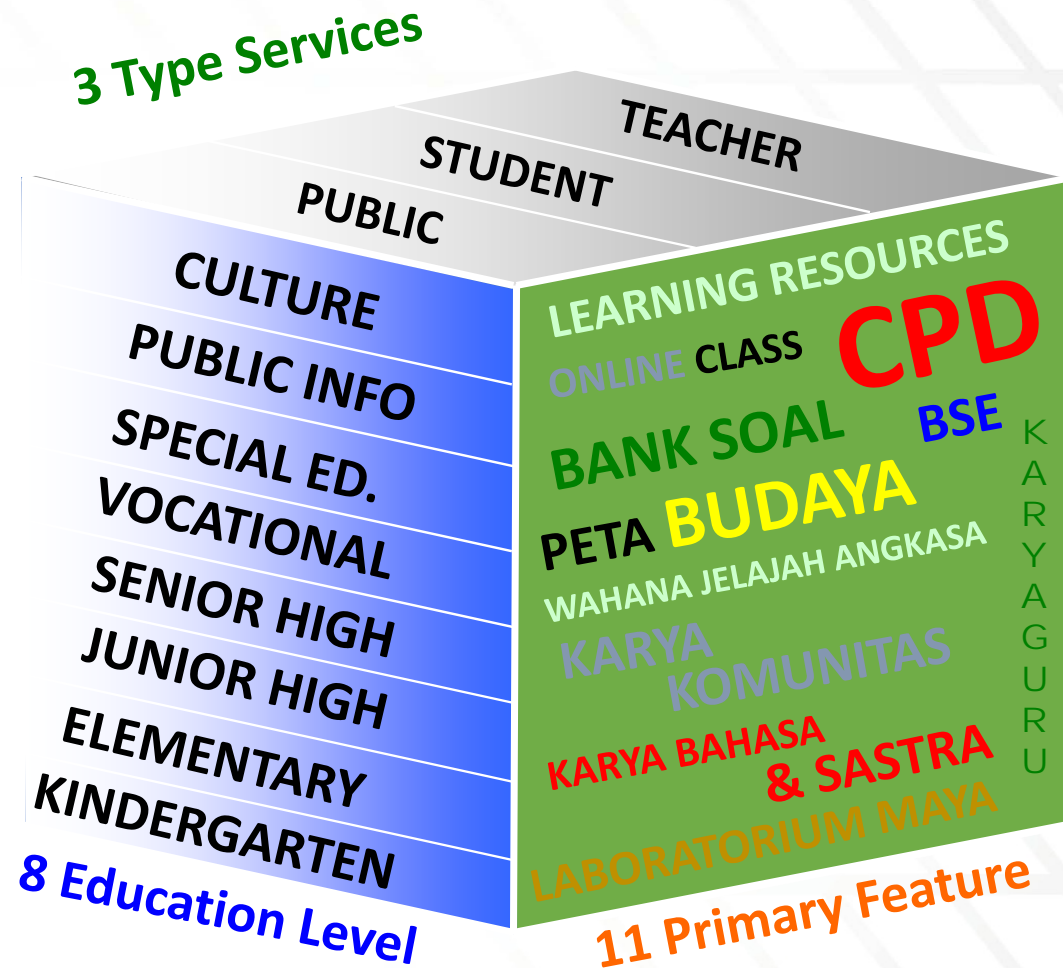
belajar.kemdikbud.go.id

tve.kemdikbud.go.id

suaraedukasi.kemdikbud.go.id

m-learning.kemdikbud.go.id

bse.kemdikbud.go.id



Teacher Learning Path in Learning House



02 – Choose Content

Teacher choose content that suitable for their class, select the content and materials to be used in class.

04 – Choose Feature

Teacher decide the tools that will be used in class, whether it is online class, or offline classroom and to conduct evaluation

06 - Evaluation

Teacher can also use the available assessment tools such as Natl. Exam Bank as a tool for evaluating or creating project for students.

01

02

03

04

05

06

01 - registration

Teacher registered in Online Learning Platform, to gain full access to content and tools for learning

03 – Create Lesson Plan

Teacher integrating selected content in lesson plan to develop interactive and quality learning.

05 – Integrated Instruction

Teacher start the teaching and learning proses using ICT as tools.



LEARNING RESOURCES IN RUMAH BELAJAR (LEARNING HOUSE)

Learning resources provides learning material/media for both teachers and students. The materials created based on current curriculum. Learning materials are created following instructional design. Learning resources are provided in several media : text(web), video, animation and simulation.

The screenshot shows the 'Rumah Belajar' website interface for SMA/MA, SMP/MTs, SD/MI, and UMUM levels. The header includes the logo and navigation options. The main content area is divided into two sections: 'Topik Terbaru SMA' and 'Topik Terbaru SMP'. Each section displays three learning resource cards.

Topik Terbaru SMA

- Tata Surya**: Geografi, Kelas 10. Features 3D characters spelling 'LEARN SMA'.
- Operasi Aljabar Dua Matriks**: Matematika, Kelas 11. Shows the matrix equation $A_{i \times j} = \begin{pmatrix} a_{11} & a_{12} & a_{13} & \dots & a_{1j} \\ a_{21} & a_{22} & a_{23} & \dots & a_{2j} \\ a_{31} & a_{32} & a_{33} & \dots & a_{3j} \\ \dots & \dots & \dots & \dots & \dots \\ a_{i1} & a_{i2} & a_{i3} & \dots & a_{ij} \end{pmatrix}$.
- Penjumlahan Vektor**: Fisika, Kelas 10.

Topik Terbaru SMP

- Masalah Tabung, Kerucut, dan Bola**: Matematika, Kelas 7. Shows a diagram of a lens focusing light rays.
- Let Me Introduce Myself and My Family**: Bahasa Inggris, Kelas 7. Features 3D characters spelling 'LEARN SMP'.
- Penyelesaian Barisan dan Deret**: Matematika, Kelas 7. Shows a sequence of triangles with 1, 2, and 3 rows of dots.

The screenshot shows the 'Rumah Belajar' website interface for PAUD (Early Childhood Education) level. The header includes the logo and navigation options. The main content area displays a grid of learning resource cards.

Media Belajar PAUD

- Aku Bisa Baca**: Video. Shows a character reading a book with the text 'a k-u ku aku b-i bi s-a sa bisa b-a bac-a ca baca'.
- Alphabet ABCD**: Video. Shows a large red letter 'A' and a girl.
- Belajar Warna**: Video. Shows colorful objects and the text 'WARNA'.
- Mengenal Angka 1-10**: Video. Shows the text 'MENGENAL ANGKA'.
- Mengenal Hewan**: Video. Shows a tiger and the text 'Hewan'.
- Menggambar Sapi**: Video. Shows a drawing of a cow and the text 'Draw and Color A Cow!'.

Digital Textbook for K-12 Students (BSE)

Buku Sekolah Elektronik
Bermutu & Terjangkau Untuk Semua
KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN HELPDISK 500-005 021-500-005 (HP), Email: bse@kemdikbud.go.id

BERANDA | DOWNLOAD BUKU | MEDIA PENDUKUNG | SOFTWARE PENDUKUNG | SARAN

Daftar Login [Lupa Password](#)

Tersedia total 1331 buku, Terdiri atas:
502 Buku SD
238 Buku SMP
338 Buku SMA
222 Buku SMK
2 Buku BAHASA

PELAJARAN TINGKAT

- Tingkat SD
- Tingkat SMP
- Tingkat SMA
- Tingkat SMK

BUKU TERBARU

- Seni Budaya (Buku Guru)**
Kelas : 7
Pengarang Eko Purnomo, Dyah Tri Paksi, Buyung Rohmanto, Ded
- Seni Budaya (Buku Siswa)**
Kelas : 7
Pengarang Eko Purnomo, Buyung Rohmanto, Deden Haerudin, Juli
- Prakarya (Buku Guru)**
Kelas : 7
Pengarang Suci Paesiti, Devi Sri Mandayani N.,

Rumah Belajar
Portal rumah belajar merupakan media belajar berbasis internet (on line) yang dibangun secara khusus untuk memudahkan guru dan siswa mendapatkan bahan atau materi untuk kepentingan mengajar siswa.
<http://belajar.kemdiknas.go.id>

Buku Pelajaran Kurikulum 2013 Didownload : 8330519 kali

1 2 3 4 5 6 > Akhir >>

Seni Budaya (Buku Guru)

Kelas 7
Pengarang Eko Purnomo, Dyah Tri Palupi, Buyung Rohmanto, Ded
Penerbit Pusat Kurikulum dan Perbukuan Kementerian Pendidikan dan Kebudayaan
Tahun 2014
Didownload 132400 kali

Seni Budaya (Buku Siswa)

Kelas 7
Pengarang Eko Purnomo, Buyung Rohmanto, Deden Haerudin, Juli
Penerbit Pusat Kurikulum dan Perbukuan Kementerian Pendidikan dan Kebudayaan
Tahun 2014
Didownload 121754 kali

Buku Sekolah Elektronik
Bermutu & Terjangkau Untuk Semua
KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN HELPDISK 500-005 021-500-005 (HP), Email: bse@kemdikbud.go.id

BERANDA | DOWNLOAD BUKU | MEDIA PENDUKUNG | SOFTWARE PENDUKUNG | SARAN

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Tahun 2014

[Komentar](#) [Download](#) [Media Pendukung](#) [Baca Online](#)

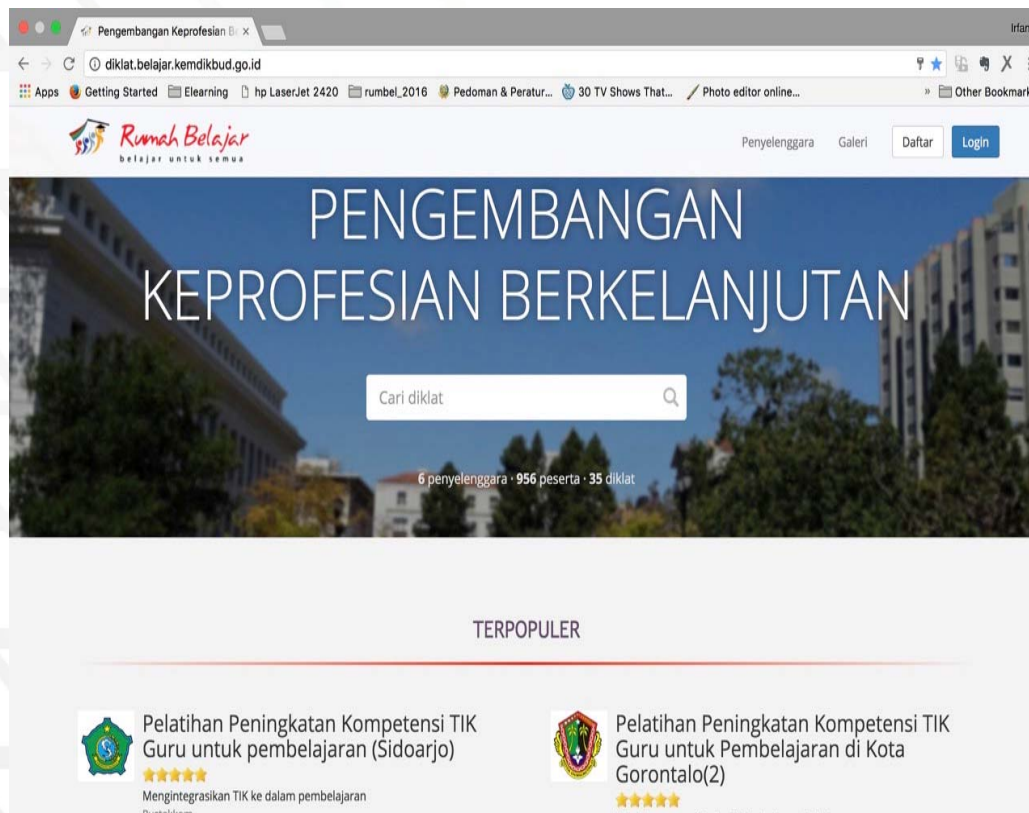
Daftar Komentar

KEMENTERIAN PENDIDIKAN REPUBLIK INDONESIA | **JARDIKNAS** | **e-dukasi.net** | **Pustakkom**

Continuous Professional Development

<https://diklat.belajar.kemdikbud.go.id>

Solution to improve ICT competencies of teachers in remote areas using online distance learning (leveling, sustainable, and measurable) due to limited resources



The screenshot shows the homepage of the 'Rumah Belajar' platform. The main heading is 'PENGEMBANGAN KEPROFESIAN BERKELANJUTAN'. Below the heading is a search bar with the text 'Cari diklat'. A navigation bar at the top includes 'Rumah Belajar belajar untuk semua', 'Penyelenggara', 'Galeri', 'Daftar', and 'Login'. The 'TERPOPULER' section displays two training courses:

- Pelatihan Peningkatan Kompetensi TIK Guru untuk pembelajaran (Sidoarjo)**: 5 stars, description: 'Mengintegrasikan TIK ke dalam pembelajaran Pictakkom'.
- Pelatihan Peningkatan Kompetensi TIK Guru untuk Pembelajaran di Kota Gorontalo(2)**: 5 stars.

Advantages;

1. Learning Resources Available 24 hours/7 days a week
2. Accessible Smartphone
3. Flexible learning hours
4. Does not reduce teaching hours
5. Report of the study recorded in the system

Monitoring System for Teachers' Activities



Real Time, Accurate and Flexible Assessment

Matematika kelas 7 SMP

Matematika
Kelas 7

Lihat Soal →

Yanny Rochyani

fisika Kelas 11

Matematika
Kelas 11

Lihat Soal →

yanny rochyani

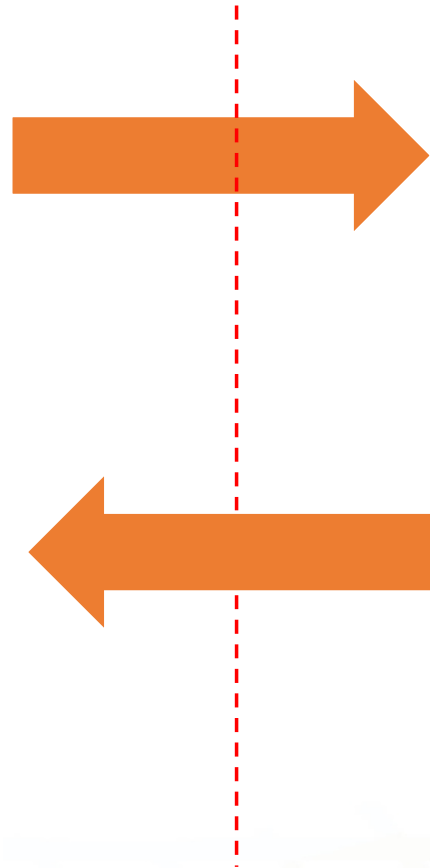
Latihan Bahasa Indonesia kelas 10

Chairil Anwar adalah seorang?

- A Penyair
- B Pedangdut
- C Petani
- D Pemain sinetron
- E Pemain Bola

Soal 2 dari 25

« 1 2 3 4 5 6 7 8 9 10 ... »»



Hasil dari $\sqrt{4} \times \sqrt{50} = \dots$

- A 42
- B 60
- C 120
- D 360

Soal 4 dari 25

« 1 2 3 4 5 6 7 8 9
10 ... »»

Kembali

2

REPOSITORY OF NATIONAL EXAMINATION TESTS

Bank Soal

Practice Exam everytime, everywhere

Repository of
National
Examination
Test

Akses berbagai Latihan, Ulangan, dan Ujian sekarang juga, Gratis !

✓ Latihan

2360

Latihan

Tes

📁 Ulangan

1906

Ulangan

Tes

📄 Ujian

3241


Ujian

Tes

3. The Provision of Internet and ICT Equipments

STRENGTHENING REMOTE AREA TEACHERS WITH ICT – TO REACH THE UNREACH

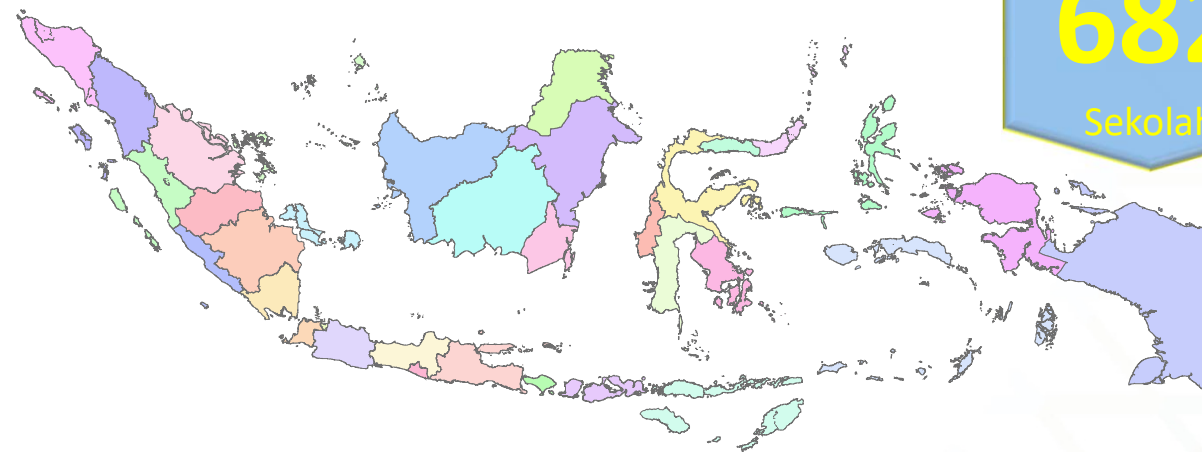
Ministry of Education and Culture is in collaboration with Ministry of Communication and Information Technology managing the USO (**universal service obligation**)* funding which is used to provide internet access for schools in remote areas.



Internet connection via VSAT

DOWNLOAD
UP TO 1,5 Mbps

UPLOAD
UP TO 0,5 Mbps



There were 164 schools in 2017 received **ICT equipment's** and **training** on how to develop instructional media using “RUMAH BELAJAR” (web based instructional media)

*) the fund is collected from 1.25% of gross revenue of telecommunication operators

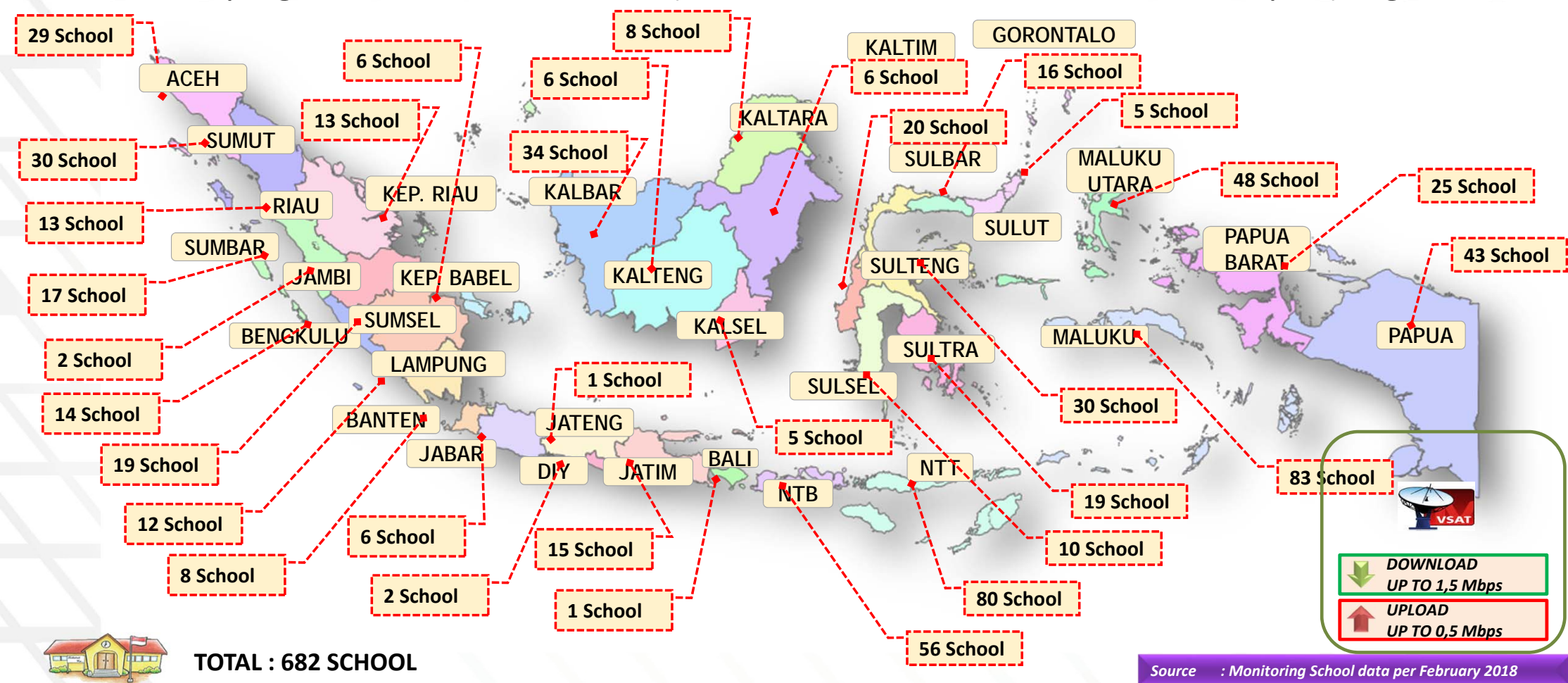
Goal

The program is expected to enhance the quality of teaching and learning of teachers in remote areas 3T (Outermost, Border and Underdeveloped) schools by providing access to sustainable internet.



Schools Distribution of ICT Training and Equipment in 3T Area

is the embodiment of the 3rd Nawacita (9 main priorities of President Program) with the developing education from the 3T (Outermost, Border and Underdeveloped) regions.



Technology Scheme



On-line Mode



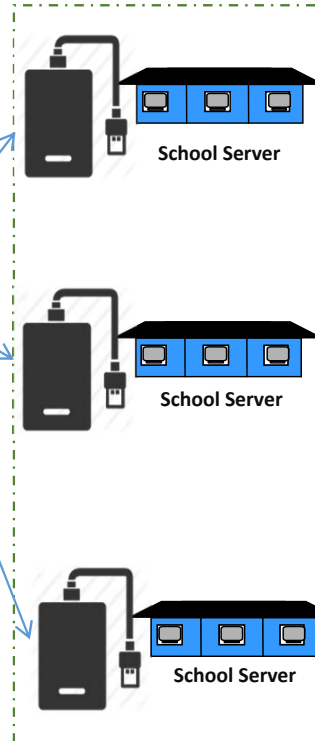
PUSTEKKOM:

Available resources;

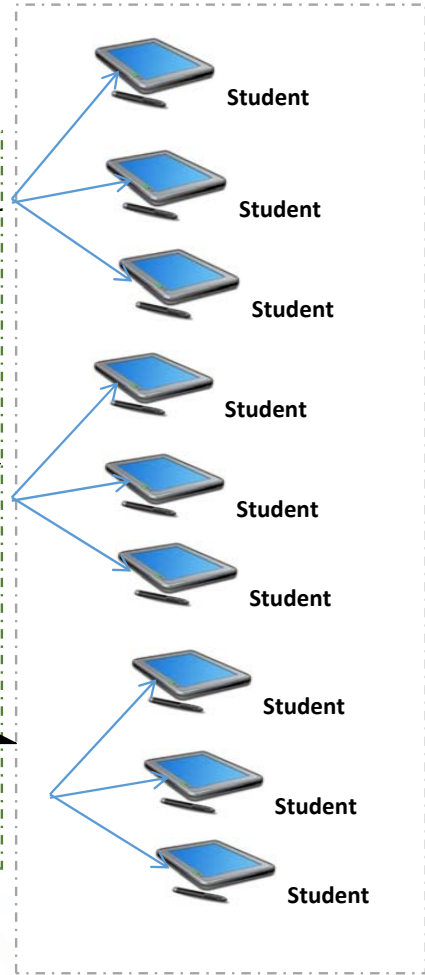
- belajar.kemdikbud.go.id
- tve.kemdikbud.go.id
- suaraedukasi.kemdikbud.go.id
- m-learning.kemdikbud.go.id
- bse.kemdikbud.go.id

Local Server
Province/
District/

Teacher



Off-line Mode



To solve connection problem, two mode are assign, online and offline.

Online Discussion Support

FORUM GURU USO
PUSTEKKOM
KEMDIKBUD -
BP3TI
KEMKOMINFO

🔒 Closed Group

About

Discussion

Members

Events

Videos

Photos

Files

Search this group 🔍

Shortcuts



Joined ▾

✓ Notifications

➦ Share

⋮ More

✍ Write Post

📷 Add Photo/Video

📺 Live Video

⋮ More



Write something...

📷 Photo/Video

🗳 Poll

😊 Feeling/Activ...

⋮

PINNED POST

ADD MEMBERS

+ Enter name or email address...

MEMBERS

810 Members



SUGGESTED MEMBERS

Hide

Friends



Ros Min Min

Add Member

Testimony



Ahmad Padiyoi with Ahmad Padiyoi.

February 10

Uda mulai di perkenalkan untuk anak2 kelas 6 SDN 2 tuladenggi, untuk pembelajara dikelas, alhamdulillah, trimkasi pihak Keminfokom, patrakom dan Disdik Kab. Parimo, yg telah membantu sekolah kami, dan juga di sekolah kami ini masi serba kekurangan yaitu laptob untuk anak2 belum ada dan juga infokus, dan harapan kami guru2 SDN 2 tuladenggi mudah2an kedepan bisa terealisasi.



Martin Skb

March 5 at 11:02am

INTERNET KAMI,,,mulai online 05 Januari 2016, TX PUSTEKKOM-KOMINFO....(SMAN 1 SIBERUT SELATAN-MENTAWAI)



SUMMARY OF THE PROGRAM

•ICT literacy Training for Teacher's Competencies

- (Level 1 and 2 UNESCO ICT Framework for Teachers)

Learning House Resource Online (Rumah Belajar)
<https://belajar.kemdikbud.go.id>

INDONESIAN TEACHERS IN REMOTE AREAS

Internet access through *Universal Services Obligation (USO)* Programme in collaboration with Ministry of Communication and Information

ICT equipments consist of :
laptop, mini server with pre-installed digital contents, access point, and LCD projector

Thank You