

INDONESIA STEM CENTERS

DEL INSTITUTE OF TECHNOLOGY



Activities at university level: STEM education integrated into university studies and research process for university students: Interdisciplinary STEM events	
Staff development in STEM Center activities (Assessment Methods in Distant Learning Session 1)	
Date	3 July 2020
Link to this event	https://drive.google.com/file/d/141xvcnLqpyGHDCdmjxr_WQiwYyasIzpq/view?usp=sharing
The main aim of this event	This webinar consisted of 4 topics: <ul style="list-style-type: none"> • Topic 1: Online and offline learning intake • Topic 2: Distributing different exam questions for different students. • Topic 3: Cheating in Distance Learning Assessments. Topic 4: Assessments or evaluations methods
Participants	The target group for this webinar is 88 lecturers of IT Del. This webinar was attended by 63 participants
Quality, evaluation of the event	Increase lecturer's knowledge about obstacles and solutions for assessment methods in distance learning.
Effectiveness	63 participants of 88 targets of lecturers IT Del (72%). Assessment methods Guideline applied by several lecturers.

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Assessment Methods in Distant Learning Session 2)	
Date	13 July 2020
Link to this event	
The main aim of this event	This webinar discussed the principles of assessment, assessment in distance learning, and various indicators for assessing students.
Participants	The target group for this webinar is 88 lecturers of IT Del.

	This webinar was attended by 51 participants.
Quality, evaluation of the event	Increase lecturers' knowledge about assessment and evaluation in distance learning.
Effectiveness	51 participants of 88 targets of lecturers IT Del (58%) Assessment methods Guideline applied by several lecturers.

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Video Production for Teaching and Mini Studio Development)	
Date	20 and 27 July 2020
Link to this event	https://drive.google.com/drive/folders/1Sp4Cw9tp6hsz73dYORrYOtCvu42ARCh3
The main aim of this event	In this webinar, speakers sharing flipped learning in online learning and how to develop video learning material
Participants	The target group for this webinar is 88 lecturers of IT Del. This webinar was attended by 56 participants in the 1 st session and 42 participants in the 2 nd session.
Quality, evaluation of the event	Improvement in the ability of lecturers for making learning videos.
Effectiveness	56 participants (session1) and 42 participants (Session 2), all of them are IT Del lecturers (57%)

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Socialization : Incentives for creating learning videos)	
Date	29 July 2020
Link to this event	https://drive.google.com/drive/folders/1jXesrA_jEOtpthdmMG4dWYpzksXzvtvx4
The main aim of this event	In this socialization, the speakers give information of categories and standards of videos, standard in audio normalization, how to measure LUFS in a video, and criteria for presentation slides.
Participants	The target group for this socialization is 88 lecturers of IT Del. This webinar was attended by 41 participants.
Quality, evaluation of the event	Increasing lecturers' knowledge about the standards and quality for making learning videos at IT Del.
Effectiveness	41 participants of 88 targets of lecturers IT Del (47%) and 51 target groups earn incentives.

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (How to Use Camtasia)	
Date	10 August 2020
Link to this event	https://drive.google.com/drive/folders/11fFa_fORZsfe7ORiNHBB6NrOxrxEuNES?usp=sharing
The main aim of this event	In this webinar, the speaker shares how to record video, audio tips, camera tips, how to edit video, audio editing, camera editing, and other features of Camtasia software.
Participants	The target group for this webinar is 88 lecturers of IT Del. This webinar was attended by 41 participants.
Quality, evaluation of the event	Improvement in the ability of lecturers at IT Del in making learning videos using Camtasia software.
Effectiveness	41 participants of 88 targets of lecturers IT Del (47%).

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Student Centered Learning and Flipped Classroom)	
Date	24 August 2020
Link to this event	
The main aim of this event	In this webinar, the UPT PP ESTEM socialized SCL implementation and flipped learning, assessment in flipped learning, sufficient rubric for online assessment, brainstorming for how to motivate students, and strategy for online teaching.
Participants	The target group for this webinar is 88 lecturers at Biotechnology and Informatics Faculty of IT Del. This webinar was attended by 19 participants.
Quality, evaluation of the event	Improvement in the ability of IT Del lecturers in designing SCL activities in a flipped classroom.
Effectiveness	19 participants of 88 targets of lecturers IT Del (38%) Policy about Flipped Classroom in IT Del has been issued.

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Socialization of Quality Standard for Online Teaching and Video Production Guidelines)	
Date	28 August 2020
Link to this event	https://drive.google.com/drive/folders/1-ORLqrDZA6IsViPXL2ZLzFzsmEM8BJ2K
The main aim of this event	In this socialization, speakers give information guidelines for video production and teaching and learning process, and guidelines for distance learning in IT Del.
Participants	The target group for this socialization is 88 lecturers of IT Del.

	This socialization was attended by 45 participants.
Quality, evaluation of the event	Improvement in the knowledge of IT Del lecturers about quality standards of online teaching and video production for distance learning.
Effectiveness	45 participants of 88 targets of lecturers IT Del (51%).

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities [Topic: High Order Thinking Skill (HOTS)]	
Date	3 rd September 2020
Link to this event	https://drive.google.com/drive/folders/1kOg0x20tWz6ZvUJzeo-kx3O200W1JrOc
The main aim of this event	The aim of this socialization was that lecturers are expected to promote HOTS elements in the teaching for students to think 'deeper' and well-designed assessment is necessary to train students' HOTS.
Participants	The target group for this socialization is 88 lecturers of IT Del. This socialization was attended by 50 participants.
Quality, evaluation of the event	Improvement in the knowledge of IT Del lecturers to implement HOTS in SCL learning activities.
Effectiveness	50 participants of 88 targets of lecturers IT Del (57%).

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Workshop on Evaluation and Assessment of Student Learning Achievement)	
Date	09 October 2020
Link to this event	https://drive.google.com/file/d/1YD6E1buZjjibEDfuruziA9h7fepMZA9c/view?usp=sharing
The main aim of this event	In this socialization, UPT PP ESTEM socialized blended learning, stages of implementing flipped classrooms, crosscheck implementation, and assessment methods for implementation.
Participants	The target group for this workshop is 88 lecturers of IT Del. This workshop was attended by 63 participants.
Quality, evaluation of the event	Ability to design flipped learning, course material production and evaluation.
Effectiveness	63 participants of 88 targets of lecturers IT Del (72%). Assessment methods applied by several lecturers.

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities	

(Sharing Session Online Exam Model at the National Science Competition)	
Date	16 October 2020
Link to this event	https://drive.google.com/file/d/1amMmpG-8yml0zp9v0U5Q_FaYU7_6GTyY/view?usp=sharing
The main aim of this event	This sharing session discusses the Online Exam Model at the National Science Competition so that lecturers are expected to be able to make their own effective online exam supervision techniques.
Participants	The target group for this sharing session is 88 lecturers of IT Del. This session was attended by 45 participants
Quality, evaluation of the event	Increase the ability of lecturers at IT Del to create their own effective online exam monitoring techniques.
Effectiveness	45 participants of 88 targets of lecturers IT Del (51%) . Exam Proctoring Guideline applied on IT Del

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Topics: Fun Learning, and Socialization of the New Distance Learning Guidelines)	
Date	06 November 2020
The main aim of this event	In this webinar, speakers sharing about: <ul style="list-style-type: none"> - Interactive learning systems, what tools can be used for interesting digital learning, and how to use Pear Deck tools. Learning implementation instruments (Filling out the Flipped Classroom Learning Implementation Checklist)
Participants	The target group for this socialization is 88 lecturers of IT Del. This webinar was attended by 45 participants
Quality, evaluation of the event	Improve the ability of lecturers at IT Del about the application of the learning process using flipped classroom and fun learning strategies using digital systems.
Effectiveness	40 participants of 88 targets of lecturers IT Del (46%). Assessment methods Guideline applied by lecturers.

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Topic: Using Lightboard)	
Date	18 November 2020
Link to this event	
The main aim of this event	In this socialization, UPT PP ESTEM Introduces technical use of Lightboard technology for creating learning videos. Lightboard technology is expected to improve student learning in a flipped classroom environment.
Participants	The target group for this workshop is 88 lecturers of IT Del. This workshop was attended by 45 participants

Quality, evaluation of the event	Improve the knowledge of lecturers at IT Del in making learning videos using lightboard technology.
Effectiveness	45 participants of 88 targets of lecturers IT Del (51%) Lightboard applied on learning video development

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Workshop on Measurement of Learning Outcomes)	
Date	15 February 2021
Link to this event	https://drive.google.com/drive/folders/1BDY8AsE7XFCYzF-B4pkx5XWIKP2KuiM
The main aim of this event	In this webinar, speakers sharing and discussed Review of Objectives and Achievements, Evaluation of Graduates' Learning Outcomes, and Key Performance Indicator
Participants	Head of the study program of each faculty, dean, and education director in IT Del. This webinar was attended by 18 participants of 23 targets
Quality, evaluation of the event	This workshop has improved the ability of lecturers at IT Del about learning objectives, learning outcomes, and how to evaluate learning outcomes based on key performance indicators.
Effectiveness	18 participants of 23 targets of lecturers IT Del (78%). Instrument of measurement learning outcomes has been implemented

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Evaluation of Learning Outcomes)	
Date	3 March 2021
Link to this event	https://drive.google.com/file/d/1rCXiRDnMU2sAh_mCwXoZFkx150xc7GCx/view?usp=sharing
The main aim of this event	In this webinar, speakers sharing and discussed the learning outcome assessment guidelines program to consider it becomes material for self-evaluation for curriculum improvement, especially for measuring graduates' readiness and graduates' learning outcomes (CPL)
Participants	Heads of the study program, deans, and education director in IT Del. This webinar was attended by 23 participants of 23 targets
Quality, evaluation of the event	Increase the ability of IT Del lecturers in the curriculum evaluation for curriculum improvement
Effectiveness	23 IT Del participants. (100%) Instrument for measurement learning has been designed and implemented

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Transformative Learning, Inquiry-Based Learning and Its Implementation in SCL)	
Date	28 April 2021
Link to this event	https://drive.google.com/drive/folders/1Ok3pst6KOfTuvqjOQThncHwFUUz-r1
The main aim of this event	In this webinar, speakers shared and discussed an approach that encourages critical thinking for the Transformative Learning Inquiry. This way of learning is expected to develop students' skills in learning and capabilities of being transformative, innovative, and creative
Participants	The target group for this webinar is 88 lecturers of IT Del. This webinar was attended by 40 participants.
Quality, evaluation of the event	Increase lecturers' knowledge about learning approaches that encourage critical thinking and Transformative Learning.
Effectiveness	40 participants of 88 targets of lecturers IT Del (46%).

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Self-directed Learning During Distance Learning)	
Date	25 June 2021
Link to this event	https://drive.google.com/drive/folders/148X2G-qFbQG011hm-79H-Dw3hm3KZMgl
The main aim of this event	In this webinar, 3 representative lecturers from each faculty shared their experiences regarding obstacles and solutions during distance learning. Then the keynote speaker gave comprehensive feedback regarding self-assessment in distance learning and how to encourage students to be self-directed learners.
Participants	The target group for this webinar is 88 lecturers of IT Del. This webinar was attended by 63 participants.
Quality, evaluation of the event	This webinar has increased lecturers' knowledge about how their students implement self-directed learning to become independent learners.
Effectiveness	63 participants of 88 targets of lecturers IT Del (72%).

Activities at university level: STEM education integrated into university studies and research process for university students	
Staff development in STEM Center activities (Socialization of High Order Thinking Skill (HOTS))	
Date	14 July 2021
Link to this event	https://drive.google.com/drive/folders/1JlAxcWrNqJ8wtpIJVcOfrJ5VHQu15u-o

The main aim of this event	In this webinar, speakers shared and trained about the development of assessment Instruments using higher-order thinking skills, critical thinking, and problem-solving to assess students.
Participants	The target group for this webinar is lecturers of IT Del. This webinar was attended by 45 participants.
Quality, evaluation of the event	This webinar has improved the ability of lecturers in developing assessment instruments using higher-order thinking skills.
Effectiveness	45 participants of 88 targets of lecturers IT Del (52%).

Activities at university level: STEM education integrated into university studies and research process for university students

Staff development in STEM Center activities (Post Pandemic Teaching and Learning Strategies)

Date	24 November 2021
Link to this event	
The main aim of this event	Participants were assigned into breakout rooms (Zoom) to reflect on their past experience in distance learning course delivery and their expectation in the future. Factors considered: institution's readiness to prepare for students' re-entry to campus, lecturer's readiness, and also facilities required in teaching and learning activities. A toolkit for hybrid learning mode was also shared.
Participants	The target group for this webinar is lecturers of IT Del. This webinar was attended by 28 participants.
Quality, evaluation of the event	This webinar has increased lecturers' knowledge about learning methods at IT Del post-pandemic (blended, hybrid, fully online, or full offline/face-to-face).
Effectiveness	28 participants of 88 targets of lecturers IT Del (32%). 3 learning methods, Direct, Distance and Hybrid has been implemented

STEM education activities for K-12 students (school pupils) and school teachers

Staff Development Course for High School Teacher (Test bed, monitoring and evaluation) (Offline)

Date	6 August 2019 – 14 January 2020
Link to this event	
The main aim of this event	IT Del has conducted Student-Centered Learning (SCL) courses for high school teachers in Toba Samosir Region from August 2019 until January 2020 with a total number of 13 participants. Program activity was conducted through several steps: <ul style="list-style-type: none"> • Workshop on Student Centered Learning. Briefing program description and timeline. • Sharing on how to write a proposal • Proposal review after submission from the teachers • Proposal finalization and funding process. Each proposal was funded by IT Del for a maximum Rp 1,000,000 to provide teaching tools.

	<ul style="list-style-type: none"> Monitoring and evaluation to each participating teacher's class Final report submission and presentation by the teachers at IT Del Campus. The number of teachers who participated in this activity was 11 participants
Participants	The target group for this webinar is K-12 teachers. The number of students who took part in the SCL implementation was 330 students.
Quality, evaluation of the event	Teachers: Improving teacher competence in designing SCL activity. Increase student understanding due to student-centered learning.
Effectiveness	There are 13 volunteer K-12 teachers and 330 students. and this event the relevant government appreciate the activities

STEM education activities for K-12 students (school pupils) and school teachers

Staff Development Course for Lecturers in IT Del (Test bed, monitoring and evaluation) (Offline)

Date	22 August 2019 – 18 December 2019
Link to this event	
The main aim of this event	<ul style="list-style-type: none"> The steps of activity included program description, proposal submission, teaching tools procurements as proposed, monitoring, mid-term and final report, and presentation. Each proposal was funded for a maximum of Rp 5,000,000. The criterion to select the proposals was the proposal which included 50% student centered assessment method. Monitoring and evaluation each participating lecturer's class Submission of final reports and presentations by lecturers at IT Del. The evaluation was attended by the Rector and IT Del EASTEM team.
Participants	The target group for this ToT Course is lecturers at IT Del, 7 lecturers participated as volunteers. The number of students participating in SCL learning was approximately 510 students
Quality, evaluation of the event	Improvement in the lecturer competence for designing SCL activity Students: increased student understanding due to student-centered learning.
Effectiveness	7 volunteers of IT Del lecturers and 510 students participants, Policy about Student Center Learning in IT Del has been issued, and guidelines of learning methods of IT Del has been issued.

STEM education activities for K-12 students (school pupils) and school teachers

Staff Development Course for External (Webinar EASTEM)

Date	30 June 2020
Link to this event	https://www.youtube.com/watch?v=3BNzKg3v_go
The main aim of this event	This webinar consisted of 4 sessions: <ul style="list-style-type: none"> Session 1: STEM Education and Independent Learning Based on Student-Centered Learning (SCL) to increase Employability and Productivity. Session 2: Critical Thinking (CT) and STEM in Independent Campus

	<ul style="list-style-type: none"> ● Session 3: Interdisciplinary courses to support Independent Learning in the New Normal era. Session 4: Reverse Class After the Covid-19 Pandemic.
Participants	The target group for this webinar is lecturers at university in Indonesia This webinar was attended by 313 participants
Quality, evaluation of the event	This webinar has provided insight to lecturers about the application of SCL in realizing independent learning after the pandemic.
Effectiveness	313 participants. Collaboration with local partners: ITB, Udayana, and Gadjah Mada.

STEM education activities for K-12 students (school pupils) and school teachers

Staff Development Course for High School Teachers in Toba Region

Date	22 June 2020
The main aim of this event	This webinar consisted of 4 sessions: <ul style="list-style-type: none"> ● Session 1: Coping with Learning in Pandemic ● Session 2: 6Cs for Indonesia's Success ● Session 3: Using Information Technology for Distance Learning Session 4: Implementation of Computational Thinking in learning
Participants	The target group for this webinar is K-12 teachers in Toba Region. This webinar was attended by 84 participants of 50 targets participants
Quality, evaluation of the event	This webinar has provided teachers with insight into STEM-based learning strategies during a pandemic with Computational Thinking.
Effectiveness	84 participants of 50 targets of participants (168%)

STEM education activities for K-12 students (school pupils) and school teachers

Staff Development Course (Computational Thinking & STEM for Higher Education)

Date	17 July 2020 – 14 August 2020
Link to this event	https://drive.google.com/drive/folders/1Ds3YJgekM95p7PUJkE2SyHFucjGPghK2
The main aim of this event	It was a serie of webinars consisted of: <ul style="list-style-type: none"> ● Session 1: CT and STEM Learning in Higher Education ● Session 2: Domain Engineering ● Session 3: Curriculum structure that supports Kampus Merdeka and STEM Session 4: Preparation of the Syllabus for Basic CT and STEM Courses
Participants	The target group for this webinar are lecturers who join the BEBRAS Indonesia community (consisting more than 87 University in Indonesia) This webinar was attended by 240 participants of 261 Targets
Quality, evaluation of the event	This webinar has provided insight to lecturers about Computational Thinking & STEM for Higher Education
Effectiveness	240 participants of 261 targets (92%)

STEM education activities for K-12 students (school pupils) and school teachers	
Staff Development Course for Teachers in Karo Region	
Date	15 April 2021
Link to this event	https://bit.ly/2OR8rBa
The main aim of this event	This webinar consisted of 3 sessions: <ul style="list-style-type: none"> ● Session 1: 21st Century Skills ● Session 2: STEM Skills Session 3: SCL
Participants	The target group for this webinar is K-12 teachers in Karo Region. This webinar was attended by 225 participants
Quality, evaluation of the event	This webinar has provided insight to teachers about 21 st Century Skills, STEM Skills, and SCL.
Effectiveness	225 K-12 teachers from Karo Region and this event the relevant government appreciate the activities

STEM education activities for K-12 students (school pupils) and school teachers	
Staff Development Course for Teachers in Karo Region (Test bed, monitoring, and evaluation)	
Date	30 June 2021 – 13 August 2021
Link to this event	https://drive.google.com/drive/folders/1Rp0bl2cqwa2i-sRxoG0merwvHkzyHmIT?usp=sharing
The main aim of this event	IT Del conducted courses for high school teachers in Karo Region from June 2021 until August 2021 with a total number of 40 participants. The program was conducted through several steps: <ul style="list-style-type: none"> ● Workshop Lesson Plans (Sharing on how to write Lesson Plans) ● Briefing program description and timeline ● Submission of final Lesson Plans ● Lesson Plans review after submission from the teachers Monitoring and evaluation of each participating teachers' Lesson Plans.
Participants	The target group for this webinar is K-12 teachers in Karo Region. The number of students participating in SCL learning was approximately 330 students.
Quality, evaluation of the event	Improvement in the teacher competence for designing SCL activity Students: increased student understanding due to student-centered learning.
Effectiveness	40 K-12 teachers and 330 students and this event the relevant government appreciate the activities

STEM education activities for K-12 students (school pupils) and school teachers	
Staff Development Course for External (SUD EXPO SCIENCE) (Test bed, monitoring, and evaluation)	

Date	15 September – 27 October 2021
The main aim of this event	IT Del's EASTEM Team conducted courses for high school teachers in Toba Region's collaboration with Del Highschool event (SUD EXPO SCIENCE) with a total number of 103 teachers and more than 300 students participants. Program activity was conducted through several steps: <ul style="list-style-type: none"> • Workshop STEM Learning (Sharing with topic 21st Century Skills, STEM Skills, and SCL) • Briefing program description and timeline • Submission of final Lesson Plans • Lesson plans review after submission from the teachers • Evaluation and presentation of each participating teachers' Lesson Plans Monitoring and Evaluation is carried out by providing feedback on the best 15 teachers' Lesson Plans
Participants	The number of students participating in SCL learning was approximately 103 teachers and more than 300 students participants of targets 100 teachers.
Quality, evaluation of the event	Teachers: Improving teacher competence in designing SCL activity Students: increased student understanding due to student-centered learning.
Effectiveness	103 K-12 teachers and more than 300 students participated. (103%) Collaborations with Del Senior High School. Local activity.

STEM activities related to industry and other institution institutions

Students learning out of campus

Date	Sept 2020 - Dec 2021
The main aim of this event	We are sending students outside campus, as part of the MBKM program (part of Higher Education the Ministry Of Education programs). The activities are internship, research, independent project outside campus (in the industries, or community)
Participants	There are about 107 students involved
Quality, evaluation of the event	Students get experience working in a real project, and real working environment and is expected to increase the employability
Effectiveness	107 students involved

STEM activities related to industry and other institution institutions

Industry Collaboration

Date	Sept 2020 - Dec 2021
The main aim of this event	Collaboration with industry to send our students. The activities are internship, research, independent project.
Participants	There are about 40 industries.
Quality, evaluation of the event	Industry can share what industry really needs

Effectiveness	40 industries
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STEM activities related to industry and other institution institutions	
Alumnae and industrial practitioner collaboration	
Date	Sept 2020 - Dec 2021
The main aim of this event	Inviting Alumnae and industrial practitioners involved in teaching and learning. They are invited to review course syllabus and do teaching.
Participants	There are about 15 alumnae/industrial practitioners involved
Quality, evaluation of the event	Students get experience working in a real project, and real working environment and is expected to increase the employability
Effectiveness	15 alumnae/ industrial practitioners involvement (15 practitioners involved attended 100%)

STEM activities related to industry and other institution institutions	
Internship for lectures.	
Date	Sept 2020 - Dec 2021
The main aim of this event	We are sending our lectures doing internship in industry/other universities
Participants	There are 3 lecturers sent for internships
Quality, evaluation of the event	Lectures get latest technology update from industry and can apply in the teaching and learning process
Effectiveness	3 IT del lecturers sent for internships. (100% - out of 3 lecturers applicants, all accepted)

UNIVERSITAS UDAYANA



Activities at university level: STEM education integrated into university studies and research process for university students	
Focus Group Discussion (FGD) of EASTEM PROJECT	
Date	August 26 th , 2019
Link to this event	
The main aim of this event	The focus of the discussion is expected to focus on the realm of Higher Education and involve the Polytechnic. It also can help overcome research problems such as, what distinguishes STEM research in advocacy, non-advocacy and teacher training? Why do polytechnics feel pressured by research? What can be done in the next 3 months to influence STEM in Indonesia? Hope in the future, there is a road map for STEM itself.
Participants	STEM concertium in Indonesia Presence <ul style="list-style-type: none"> • Expert Staff of Ministry of Education and Culture of Indonesia - Ibu Prof Paulina Pane • ITB – Bapak Mervin Hutabarat • UGM – Bapak Irwan Endrayanto • UNUD – Prof Made Utama, Dewa Ayu Swastini, Agus Muliantara, Dewa Made Bayu Atmaja Daharmawan, Ibu Desak Wihandani, Bapak I Nyoman Budiarsa, Bapak Gede Sukadarmika • ITDEL – Ibu Inggriani Liem • UPI – Prof Lilia Sari
Quality, evaluation of the event	We have the concertium as a partner, network to discuss and to plotting the roadmap of STEM Education

Activities at university level: STEM education integrated into university studies and research process for university students	
Sosialisasi EASTEM Udayana	
Date	December 13 rd , 2019
Link to this event	

https://www.unud.ac.id/in/berita3227-Upayakan-Peningkatan-Employability-Unud-Selenggarakan-Sosialisasi-EASTEM-Project.html	
The main aim of this event	<p>Jimbaran - Udayana University held an EASTEM Project Socialization and Completion of the STEM Education Questionnaire, Friday (12/13/2019) in the LP2M Meeting Room, Integrated Lab Building Lt. IV Udayana University, Bukit Jimbaran Campus. Vice Chancellor for Academic Affairs Prof. Dr. Ir. I Nyoman Gde Antara, M. Eng gave a speech while opening the event which was also attended by the Chairperson of the LP3M Learning Development Center, FMIPA Dean, FMIPA and FTP Vice Dean I, Study Program Coordinator and lecturer representatives from the Mathematics and Natural Sciences Faculty and the Agricultural Technology Faculty.</p> <p>Prof. In his remarks, he expressed his support for the implementation of this program. EASTEM is the fourth research project at Udayana University funded by Erasmus+. The STEM project is a collaborative project with overseas cooperation partners which will later be recorded in the accreditation forms both AIPT and study program accreditation. The targeted outcome of this project is to increase community interest in studying at the Study Program in order to increase employability when they become alumni.</p>
Participants	<p><i>Lecturer in Faculty of Natural Sciences and faculty of Faculty of Agriculture Technology</i></p> <p>(60 Participants)</p>
Quality, evaluation of the event	The Participants know the relationship of STEM education with the collage education, so they will learn and try to engage the education for our students

Activities at university level: STEM education integrated into university studies and research process for university students	
TOT STEM UDAYANA	
Date	December 13 rd , 2019
Link to this event	https://www.unud.ac.id/in/berita3227-Upayakan-Peningkatan-Employability-Unud-Selenggarakan-Sosialisasi-EASTEM-Project.html
The main aim of this event	Blended Learning – SCL
Participants	<p>Lecturer in Faculty of Natural Sciences and faculty of Faculty of Agriculture Technology</p> <p>(60 Participants)</p>
Quality, evaluation of the event	Knowing how to build a SCL learning method in our lecture

Activities at university level: STEM education integrated into university studies and research process for university students	
Webinar EASTEM INDONESIA	
Date	June 30 th , 2020
Link to this event	
The main aim of this event	FLIPPED CLASSROOM PASCA PANDEMI COVID-19 (FLIPPED CLASSROOM For AFTER PANDEMIC COVID-19)
Participants	Indonesian Participants (More than 250 Participants)
Quality, evaluation of the event	Knowing about what is Flipped Classroom and the relation with SCL

STEM education activities for K-12 students (school pupils) and school teachers	
Training – courses for K-12 teachers: STEM – Transforming classrooms, schools and lives	
Date	December 23 rd , 2020
Link to this event	https://www.instagram.com/p/CJIVCaQA3IR/?utm_source=ig_web_copy_link
The main aim of this event	The transformation of classroom to the future
Participants	K-12 Teachers and Students from Junior High School 3 Denpasar Bali (More than 30 Participants)
Quality, evaluation of the event	Knowing the ability needs in the 21 st Centuries, Critical thinking (Berpikir kritis): Menemukan solusi untuk masalah Creativity (Kreativitas): Berpikir di luar kotak Collaboration (Kolaborasi): Bekerja dengan orang lain Communication (Komunikasi): Berbicara dengan orang lain Information literacy (Melek informasi): Memahami fakta, angka, statistik, dan data Media literacy (Melek media): Memahami metode dan outlet di mana informasi dipublikasikan Technology literacy (Melek teknologi): Memahami mesin yang memungkinkan Era Informasi Flexibility (Fleksibilitas): Menyimpang dari rencana sesuai kebutuhan Leadership (Kepemimpinan) : Memotivasi tim untuk mencapai tujuan Initiative (Inisiatif): Memulai proyek, strategi, dan rencana sendiri Productivity (Produktivitas): Selalu efisiensi Social skills (Keterampilan sosial): Bertemu dan berjejaring dengan orang lain untuk keuntungan bersama

STEM education activities for K-12 students (school pupils) and school teachers	
Google Classroom	
Date	August, 21 st 2021
Link to this event	
The main aim of this event	Training of using Google workspace especially google classroom for Teachers to engage the education in Elementary School at Melinggih Village- Gianyar Regency
Participants	Teachers of Elementary School (12 Participants)
Quality, evaluation of the event	How using google workspace due to improve the education in Elementary School.

STEM activities related to industry and other institution institutions	
UNIVERSITY - UNIVERSITY	
Perubahan Visi Misi dan Peninjauan Kurikulum MBKM Prodi Teknik Informatika UNDHIRA	
Date	September 7 th 2021
Link	https://www.instagram.com/p/CThV5anlW35qAnDyvrCTuX0wd1usJcsZKFL3280/
The main aim of this event	Curriculum engagement for Dhyana Pura University Denpasar Bali.
Participants	Lecturers, Students, and Stakeholders of Dhyana Pura University, alumnes, Stakeholders, partners, APTIKOM Association, representatives of ITB STIKOM BALI, STMIK STIKOM INDONESIA, UNIVERSITAS UDAYANA, LPMP UNDHIRA.
Quality, evaluation of the event	The benefits is knowing the right track or the right roadmap for MBKM (Merdeka Belajar Kampus Merdeka – The Freedom of learning) curriculum which is actually inline with the STEM Project.

THE BANDUNG INSTITUTE OF TECHNOLOGY



Activities at university level: STEM education integrated into university studies and research process for university students	
The Indonesian Robot Contest (KRI) 2020	
Date	November 2020
Link to this event	https://kri2020.itb.ac.id/
The main aim of this event	The Indonesian Robot Contest (KRI) is a design and engineering competition in the field of robotics. It provide a platform for students to develop engineering skills in the field of robotics through a competition.
Participants	ITB and other university tudents. Mechanical and electrical engineering students in collaboration with students from other fields. 325 students.
Quality, evaluation of the event	1. Develop and improve student creativity in Higher Education; 2. Applying Science and Technology to the real world; 3. Improving students' abilities in the development of robotics technology; 4. Increase the sensitivity of students in solving the nation's problems by using robotics technology; 5. Introducing elements of the arts and culture of the Indonesian people, especially the art of dance has been famous in the motherland to students in universities; 6. Cultivate a competitive climate in the university environment.

Activities at university level: STEM education integrated into university studies and research process for university students	
Digital Innovation & Entrepreneurship	
Date	July – November 2021
Link to this event	https://sites.google.com/staff.stei.itb.ac.id/mbkm/home?authuser=0
The main aim of this event	Students compete in the process of business initiation, product development, and business development. The aim is to increase innovation in the field of informatics which has an impact on the growth of the digital industry in Indonesia and to provide research results that can solve real problems in society.

Participants	ITB and other university students. Computer science students in collaboration with students from other fields. 325 students.
Quality, evaluation of the event	Improve the ability of graduates to work/collaborate in a multidisciplinary environment and solve real problems in the wider community, industry, and science. Building a start-up business in the field of Informatics/Information Technology so that it becomes the engine of growth for this industry in Indonesia. Build multidisciplinary collaboration, so that it can provide solutions to real problems through a service/software product
Effectiveness	Evaluation of the program in on going.

Activities at university level: STEM education integrated into university studies and research process for university students	
Student Competition Mentorship Competitions that are supported and successfully followed by students.	
Date	All year long
Link to this event	https://kemahasiswaan.itb.ac.id/Daftar_prestasi
The main aim of this event	Mentorship for students who take part in various entrepreneurship competition programs. The aim of this activity is to provide consultation and infrastructure facilities and facilities to support student research in preparation for participating in multidisciplinary competitions.
Participants	ITB students. 370 students.
Quality, evaluation of the event	Students are expected to be able to carry out research and development well, be able to communicate well and convey their thoughts and ideas both to experts in their fields and to ordinary people.
Effectiveness	Mentoring and providing supporting facilities for students help increase the number of students' interest and success in participating in competitions.

Activities at university level: STEM education integrated into university studies and research process for university students	
Traning on utilising ITB Learning Management System for Online Lecture	
Date	30 July 2020
Link to this event	https://drive.google.com/file/d/1SVaNAG_TLjbrqN7J_0NvnrRMJJKp53d/view?usp=sharing
The main aim of this event	Lecturers are able to effectively utilize ITB-LMS for conducting online course
Participants	Lecturers at School of Electrical Engineering and Informatics, ITB (77 participants)
Quality, evaluation of the event	The benefit for universities is that learning continues during the COVID-19 pandemic. The benefits for the trainees are having an understanding of how to use LMS in learning and being able to design online learning.
Effectiveness	This training helps increase the number of lecturers who use online learning. But this also happened because of the pressure of the Covid-19 pandemic.

Activities at university level: STEM education integrated into university studies and research process for university students	
Training on "Student-Centered Learning (SCL) Implementation on STEM Online Learning"	
Date	14 August 2020
Link to this event	
	https://drive.google.com/file/d/1zy4wcAKmCW-VJUbx0BJgYbItCNfhsi3q/view?usp=sharing
The main aim of this event	Lecturers are able to conduct online/offline course in SCL way
Participants	Lecturers at School of Electrical Engineering and Informatics, ITB (55 participants)
Quality, evaluation of the event	The achievement of learning outcomes can be guaranteed. Lecturers can design online learning for higher order thinking skills with SCL.
Effectiveness	This training helps increase the number of lecturers who use various SCL models online.

Activities at university level: STEM education integrated into university studies and research process for university students	
Training for Lecturers: Online learning overview and quality control	
Date	June 30-July 2nd 2020
Link to this event	
	https://ditbangdik.itb.ac.id/category/kuliah-online-itb/kuliah-online-itb-untuk-dosen/
The main aim of this event	Lecturers have insights about online lectures and quality assurance of teaching and learning
Participants	Lecturers of ITB (1000 participants)
Quality, evaluation of the event	The achievement of learning outcomes can be guaranteed. Lecturers can develop online learning with good quality according to the standards imposed by the university.
Effectiveness	This training helps increase the number of lecturers who use online learning to the quality standards set by the university.

Activities at university level: STEM education integrated into university studies and research process for university students	
Training for Lecturers: Development of Online Learning Content	
Date	July 7th-9th 2020
Link to this event	
	https://web.microsoftstream.com/video/46b82460-60eb-4cbe-8812-9e2f14e9bdc5
The main aim of this event	Lecturers are able to develop content using their own equipment with following the standard output of the content
Participants	Lecturers of ITB (1000 participants)
Quality, evaluation of the event	The benefit for universities is that learning continues during the COVID-19 pandemic. The benefits for the trainees are having an understanding of how to use LMS in learning and being able to design online learning.
Effectiveness	This training helps increase the number of lecturers who use online learning. But this also happened because of the pressure of the Covid-19 pandemic.

Activities at university level: STEM education integrated into university studies and research process for university students	
Training for Lecturers: Online Classroom Management	
Date	
Link to this event	
	https://web.microsoftstream.com/video/ecc8df87-e7ba-483c-a259-20caaccf48a0
The main aim of this event	Lecturers are able to manage and conduction online course using LMS
Participants	Lecturers of ITB (1000 participants)
Quality, evaluation of the event	This training helps increase the number of lecturers who use online learning. But this also happened because of the pressure of the Covid-19 pandemic.

STEM activities related to industry and other institution institutions	
Networking and innovative project implementation between University-Industry;	
Date	May 2021 – July 2021
Link	
	https://paragonfellows.com/paragon-internship-program/
The main aim of this event	Preparation and development of student internships and capstone design collaborations in industry. The aim to provide a term of reference for the implementation of internships and capstone designs carried out in the industry.
Participants	Industry, industry internship mentors, university internship supervisors. The number of participants is 3 industries with 21 mentors and supervisors.
Quality, evaluation of the event	The university and industry provide a place for internships and implementation of student capstone designs with mutually agreed targets and objectives. The university obtains a cooperative model that can be duplicated for collaboration with other industries. Industry can carry out student internships that are in line with their education at the university.
Effectiveness	The parties succeeded in agreeing on the topic of student internships and capstone design as well as the objectives, time frame, and method of assessment.

STEM activities related to industry and other institution institutions	
Networking and innovative project implementation between University-Industry;	
Date	August 2021 - now
Link	https://paragonfellows.com/paragon-internship-program/

The main aim of this event	Industrial internship dan and capstone design programs
Participants	Students and student capstone design groups. Total 18 students in 6 groups.
Quality, evaluation of the event	Students work in actual environment to develop their necessary skills and tools to succeed as they transition into professionals. Students are able to solve real problems: design, implement, and test solutions.
Effectiveness	On going project. Performance assessment with a rubric shows the results at the current stage are going well.

STEM activities related to industry and other institution institutions	
Development of product development courses in collaboration with industry	
Date	May 2021 - now
The main aim of this event	Problem solving courses are fostered by industry to gain an industry perspective from idea development to marketing.
Participants	Industry experts and lecturers.
Quality, evaluation of the event	Universities may offer courses with an industry view from industry experts. Students can follow the steps of product development from an industry perspective.
Effectiveness	On going

STEM activities related to industry and other institution institutions	
Networking and innovative project implementation between University – Government;	
Date	August – November 2019
The main aim of this event	Development of higher education STEM education policies with the Advisor to the Minister of Research, Technology and Higher Education.
Participants	7 experts from 5 universities.
Quality, evaluation of the event	The establishment of an explicit policy of STEM education for higher education. Support from the Ministry of Research, Technology and Higher Education in STEM education programs.
Effectiveness	The resulting document was not followed up due to changes in the structure and ministry officials related to education.

UNIVERSITAS GADJAH MADA



Activities at university level: STEM education integrated into university studies and research process for university students	
Focus Group Discussion UGRG & PSDMBP: Increasing the Added Value of Coal	
Date	5-6 Aug. 2020
Link to this event	https://ugrg.ft.ugm.ac.id/newsevents/focus-group-discussion-ugrg-psdmbp-increasing-the-added-value-of-coal/
The main aim of this event	The aim is to discuss about added value of coal, focusing on the concept of green transmutation and circular economy.
Participants	Professional
Quality, evaluation of the event	

Activities at university level: STEM education integrated into university studies and research process for university students	
Webinar Series Part 1 – Exploration & Extraction of Critical Elements as Geoeconomic Resources: Current & Future Advancement	
Date	30 Oct. 2020
Link to this event	https://ugrg.ft.ugm.ac.id/newsevents/webinar-ugrg-seri-1-exploration-extraction-of-critical-elements-as-geoeconomic-resources-current-future-advancement-2/
The main aim of this event	
Participants	Student and professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.

Activities at university level: STEM education integrated into university studies and research process for university students	
Webinar Series Part 2 – Downstream Mineral Processing, Key to Optimize Mineral Utilization	
Date	14 Nov. 2020
Link to this event	https://ugrg.ft.ugm.ac.id/newsevents/webinar-ugrg-seri-2-downstream-mineral-processing-key-to-optimize-mineral-utilization-2/

The main aim of this event	
Participants	Student and professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.

Activities at university level: STEM education integrated into university studies and research process for university students	
Webinar Series Part 3 – The Endeavor of Coal Added Value in Indonesia	
Date	27 Nov. 2020
Link to this event	https://ugrg.ft.ugm.ac.id/newsevents/free-webinar-series-part-3-the-endeavor-of-coal-added-value-in-indonesia-2/
The main aim of this event	
Participants	Student and professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.

Activities at university level: STEM education integrated into university studies and research process for university students	
Focus Group Discussion: Coal Added Value in Indonesia	
Date	14-15 Oct 2021
Link to this event	https://ugrg.ft.ugm.ac.id/beritaacara/2732/
The main aim of this event	
Participants	Professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.

Activities at university level: STEM education integrated into university studies and research process for university students	
Focus Group Discussion: Big Data Management	
Date	17 Oct 2021
Link to this event	https://ugrg.ft.ugm.ac.id/beritaacara/focus-group-discussion-pengembangan-sistem-manajemen-big-data-batubara/
The main aim of this event	
Participants	Professional

Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.
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Activities at university level: STEM education integrated into university studies and research process for university students	
Focus Group Discussion: Valuable elements in coal	
Date	1-4 Nov. 2021
Link to this event	https://ugrg.ft.ugm.ac.id/beritaacara/focus-group-discussion-peningkatan-nilai-tambah-batubara-valuable-elements-di-batubara-dan-abu-hasil-pembakarannya/
The main aim of this event	
Participants	Professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.

Activities at university level: STEM education integrated into university studies and research process for university students	
Webinar: Valuable elements in coal: current and future trend	
Date	14-15 Dec. 2021
Link to this event	
The main aim of this event	
Participants	Student and professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.

Activities at university level: STEM education integrated into university studies and research process for university students	
Focus Group Discussion: Valuable elements in coal	
Date	20 Dec 2021
Link to this event	
The main aim of this event	
Participants	Professional
Quality, evaluation of the event	We evaluate the webinar series to get feedback from the participants to improve the quality and to survey the topic for the next webinar.