

Search

Series: **Advances in Social Science, Education and Humanities Research**

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

HOME

The 1st International Conference on Early Childhood and Primary Education (ECPE) was held in Malang, Indonesia during 21-22 September 2018. Education will inevitably play a key role in the national development. It can be used to enhance the quality of people's lives. Although education is an important factor for the national development, some countries around the world still face education problems, such as quality, access, and relevance. Although much work has been done to date, more discussions need to be conducted to identify the strategies to enhance the quality of education, especially the quality of early childhood and primary education. This International Conference on Early Childhood and Primary Education is identified as being of importance to education stakeholders in providing them the necessary background to improve the quality of early childhood and primary education.

Please click [here](#) for the conference website.

Atlantis Press

Atlantis Press is a professional publisher of scientific, technical and medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

Search

Series: [Advances in Social Science, Education and Humanities Research](#)

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

PUBLISHING INFORMATION

Bibliographic information:

Title

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

Editors

Drs. I Wayan Sutama, M.Pd
Sandi Tegariyani PS, S.Pd, M.Pd
Puri Selfi Cholifah, S.Pd, M.Pd
Putri Mahanani, S.Pd, M.Pd
Yuniawatika, S.Pd, M.Pd
Yulia Linguistika, S.Pd, M.Pd
Arda Purnama Putra, S.Pd, M.Pd

Part of series

[ASSEHR](#)

Volume

244

ISSN

2352-5398

ISBN

978-94-6252-584-9

Indexing

All articles in these proceedings are submitted for indexation in **CPCI**, **CN** and **Google Scholar**. Optionally, we also submit to **Compendex** and **Scopus**. Note that in case you need information about the indexation of these proceedings, please check with the organizers of the conference as we cannot reply to messages received from participants.

Free Access

In order to increase the visibility of this conference and of the papers from its participants, this conference has chosen to sponsor the online publication of the conference papers. Therefore, all conference papers can be read and downloaded **for free**; no subscription or other payment is required.

Copyright

The copyright of all articles published in these proceedings remains with the **Authors**, i.e. Authors retain full ownership of their article. Permitted third-party reuse of the open access articles is defined by the applicable **Creative Commons (CC)** end-user license which is accepted by the Authors upon submission of their paper. All articles in these proceedings are published under the **CC BY-NC 4.0** license, meaning that end users can freely **share** an article (i.e. copy and redistribute the material in any medium or format) and **adapt** it (i.e. remix, transform and build upon the material) on the condition that proper **attribution** is given (i.e. appropriate credit, a link to the applicable license and an indication if any changes were made; all in such a way that does not suggest that the licensor endorses the user or the use) and the material is only used for **non-commercial** purposes. For more information,

please refer to the **Open Access and User Licenses** section in the Atlantis Press **Open Access & Article Sharing** policy.

DOIs

Each article that is published in these proceedings is assigned a **Digital Object Identifier (DOI)**. DOIs are standardized digital identities which can be used to cite and link to electronic content. A DOI is guaranteed to never change, so can be used as a persistent identifier to permanently link to an electronic article no matter where it is stored. More information on how to

cite and use DOIs can be found [here](#).



Permanent Archiving

Atlantis Press is committed to the **permanent availability** and **preservation** of scholarly research and to ensure **accessibility** to this research by converting and upgrading digital file formats to comply with new technology standards. Besides maintaining its own digital archive, Atlantis Press therefore collaborates with the [National Library of the Netherlands](#) which permanently archives all Atlantis Press content in their “**e-Depot**”. All proceedings are uploaded to this e-Depot after publication to guarantee permanent archiving of the articles.

Print Copies

In case you wish to have **printed copies** of these proceedings you can order these directly from our partner [Curran Associates](#).

Atlantis Press

Atlantis Press is a professional publisher of scientific, technical and medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com

▶ PROCEEDINGS

▶ ABOUT

▶ JOURNALS

▶ NEWS

▶ BOOKS

▶ CONTACT

▶ PUBLISHING SERVICES

▶ SEARCH





[PROCEEDINGS](#) | [JOURNALS](#) | [BOOKS](#)

Search

Series: **Advances in Social Science, Education and Humanities Research**

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

ORGANIZERS

General Chairs

Prof. Dr. Bambang Budi Wiyono, M.Pd

Dean Faculty of Education State University of Malang Indonesia

Program Chairs

Drs.Imam Nawawi, M.Si

Head of Department of Primary Education an Preschool Stete University of Malang Indonesia

Dr. Chee Han Lim

Senior Lecturer Singapore University of Social Science

Anabelie V. Vandez, Ph.D

Mindanao State University

Organizing Committee

Dr. Sutarno, M.Pd

Faculty of Education State University of Malang Indonesia

Ni Luh Sakinah Nuraini, S.Pd., M.Pd.

Faculty of Education State University of Malang Indonesia

Retno Tri Wulandari, S.Pd., M.Pd

Faculty of Education State University of Malang Indonesia

Dra. Sukamti, M.Pd

Faculty of Education State University of Malang Indonesia

Drs. Dimyati, M.Pd

Faculty of Education State University of Malang Indonesia

Drs. I Wayan Sutama, M.Pd

Faculty of Education State University of Malang Indonesia

Atlantis Press

Atlantis Press is a professional publisher of scientific, technical and medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com

▶ PROCEEDINGS

▶ JOURNALS

▶ BOOKS

▶ PUBLISHING SERVICES

▶ ABOUT

▶ NEWS

▶ CONTACT

▶ SEARCH

Search

Series: **Advances in Social Science, Education and Humanities Research**

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

PREFACE

Education will inevitably play a key role in the national development. It can be used to enhance the quality of people life. Although education is an important factor for the national development, some countries around the world still face education problems such as education quality, education access, and education relevance. Improving performance in education is crucial to meeting the challenge or reaching a high income status. Although much work has been done to date, more discussions need to be conducted to identify the strategies to enhance the quality of education, especially the quality of early childhood and primary education.

The 1st International Conference on Early Childhood and Primary Education (ECPE) with the theme of “Policies and Strategies to Enhance the Quality of Early Childhood and Primary Education” is identified as being of importance to education stakeholders in providing them the necessary background to improve the quality of early childhood and primary education. The purposes of the conference are: (1) to identify some global issues around early childhood and primary education; (2) to identify some policies and strategies to improve the quality of early childhood and primary education; (3) to establish an international forum where all the participants have opportunities to share ideas, experiences, expertise, and knowledge on the global issues of educational practices and development; and (4) to facilitate all participants or institutions to build business relationship for their future development.

The conference is held on 21 – 22 September, 2018 at the Royal Orchid Ho Batu-Malang, Indonesia. This conference is organized by Department of Primary Education and Early Childhood Education, Faculty of Education, State University of Malang. The conference involves the keynote speakers from USA, Finland, Malaysia, Palladium, and Indonesia. Compulsory quality assurance features for the conference include web-based paper submission, plagiarism check, and double-blind review is a procedure that has been undertaken for the papers to be proposed and published in the proceedings. Based on the reports, 55 papers were accepted to be presented on ECPE 2018 by the editors.

We would like to express our deep appreciation and gratitude to all the members of the 1st ECPE. We would also appreciate the assistance of Atlantis Press in producing the volume of the collected papers. In the end, we wish to express appreciation to all the authors for their outstanding contributions to this valuable volume. Hopefully, this conference can contribute to improving the quality of education in Indonesia in particular and global education in general.

On behalf of the Organizing Committee,
Dean of Faculty of Education, State University of Malang
Prof. Dr. Bambang Budi Wiyono, M.Pd

Atlantis Press

Atlantis Press is a professional publisher of scientific, technical and medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com

► PROCEEDINGS

► JOURNALS

► BOOKS

► ABOUT

► NEWS

► CONTACT

Search

Indexing Databases

INDEXING DATABASES

Atlantis Press has affiliations with the following indexing databases:

Web of Science
Trust the difference

Web of Science

Clarivate Analytics' *Web of Science* is an online subscription-based citation indexing service which gives access to multiple databases that reference cross-disciplinary research and which allows for comprehensive citation search and in-depth exploration of specialized sub-fields within a scientific discipline. It consists of 6 core databases, a number of specialist collections, as well as regional databases and currently contains more than 160 million records and over 1.7 billion cited references. A select number of Atlantis Press journals and proceedings is indexed in Web of Science databases such as the *Science Citation Index Expanded* (SCIE), the *Emerging Sources Citation Index* (ESCI) and the *Conference Proceedings Citation Index* (CPCI).

Scopus[®]

Scopus

Elsevier's *Scopus* is the world's largest abstract and citation database of peer-reviewed scientific journals, books and conference proceedings which covers research topics across

all scientific, technical and medical disciplines. The data currently contains more than 75 million records and over 1 billion cited references, while it also offers various smart tools and metrics to track, analyze and visualize research. At present a select number of Atlantis Press journals and proceedings is indexed in Scopus and a number of applications are in progress.

MEDLINE

MEDLINE

MEDLINE is the **U.S. National Library of Medicine** premier bibliographic database that contains more than 25 million references to journal articles in life sciences with a concentration on biomedicine. The subject scope of MEDLINE is biomedicine and health, broadly defined to encompass those areas of the life sciences, behavioral sciences, chemical sciences and bioengineering needed by health professionals and others engaged in basic research and clinical care, public health, health policy development or related educational activities. MEDLINE also covers life sciences vital to biomedical practitioners, researchers and educators, including aspects of biology, environmental science, marine biology, plant and animal science as well as biophysics and chemistry. A select number of Atlantis Press journals in health and medical sciences is indexed in MEDLINE.

PubMed Central (PMC)



PubMed Central (PMC) is a free full-text digital archive of biomedical and life sciences journal literature which has been developed and operated by the **National Center for Biotechnology Information** (NCBI), a division of the **U.S. National Library of Medicine** (NLM) at the **U.S. National Institutes of Health** (NIH). As of today, PMC contains more

than 5.9 million full-text articles spanning several centuries of biomedical and life science research (late 1700s to present). Participation by publishers in PMC is voluntary, although participating journals must meet certain scientific and technical standards and content must be deposited as per the NIH Public Access Policy. A select number of Atlantis Press journals in health and medical sciences is indexed in PMC.



Directory of Open Access Journals (DOAJ)

The *Directory of Open Access Journals* (DOAJ) is a community-curated online directory of open access journals which aims to be the starting point of all information searches for quality, peer-reviewed, open access material. DOAJ's mission is to increase the visibility, accessibility, reputation, usage and impact of quality, peer-reviewed, open access scholarly research journals globally, regardless of discipline, geography or language. At present, the directory contains more than 14,000 open access journals from 133 countries and more than 4.6 million open access articles covering all areas of science, technology, medicine, social science and humanities. All Atlantis Press journals are indexed in DOAJ.



Ei Compindex

Elsevier's *Ei Compindex* (Engineering Index - COMPuterized ENgineering inDEX) on *Engineering Village* is the broadest

and most complete engineering literature database in the world. It provides a holistic and global view of peer-reviewed and indexed publications with over 20 million records from 77 countries across 190 engineering disciplines. A select number of Atlantis Press journals (i.e. within relevant subject areas) is indexed in Ei Compindex.



PubMed

PubMed is a free search engine which provides access to references and abstracts from biomedical and life sciences literature and which has been developed and maintained by the **National Center for Biotechnology Information** (NCBI), a division of the **U.S. National Library of Medicine** (NLM) at the **U.S. National Institutes of Health** (NIH). PubMed comprises more than 30 million citations and abstracts, primarily from **MEDLINE** but also from **PubMed Central** (PMC) and other life science journals and books, covering the fields of biomedicine and health and portions of the life sciences, behavioral sciences, chemical sciences and bioengineering. Many PubMed records also contain links to full-text articles, some of which are freely available (often in PMC). A select number of Atlantis Press journals in health and medical sciences is indexed in PubMed.



Portico

Portico is a community-supported digital preservation archive that safeguards permanent access to e-journals, e-books and digital collections for researchers, scholars and students. The Portico digital preservation service is part of **ITHAKA**, a not-for-profit organization which aims to "help the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways". The Portico archive currently contains more than 88 million journal articles, more than 1 million books and more than 4 million other digital collection items from a total number of 663 participating publishers. To comply with NLM requirements (for indexation in **MEDLINE** and **PMC**) a select number of Atlantis Press journals is



China National Knowledge Infrastructure (CNKI)

The *China National Knowledge Infrastructure* (CNKI) is a key national information construction project launched by *Tsinghua University* and supported by the PRC Ministry of Education, PRC Ministry of Science and Technology, PRC Ministry of Propaganda and the PRC General Administration of Press and Publication. It is dedicated to the mass digitization of China knowledge resources as well as creating the platform for global dissemination and value-added services (CNKI was designated as the second agent of DOIs in mainland China by the *International DOI Foundation* in 2013). It comprises the China Integrated Knowledge Resources Database which contains over 90% of China knowledge resources. Most of the Atlantis Press proceedings and journals content is indexed in CNKI.



Wanfang Data

Wanfang Data is an affiliate of the Chinese Ministry of Science & Technology which provides access to a wide range of database resources serving as a gateway to Chinese culture, medicine, business, science, engineering, etc. The Wanfang Data electronic resources comprise more than 43 million journal articles, close to 5 million dissertations and theses, more than 4 million conference papers and a broad collection of Chinese statistical data, patents, etc. Most of the Atlantis Press proceedings and journals content is indexed in Wanfang.

ProQuest's *Ulrichsweb* is the standard online library directory and database for journals, magazines, newspapers and other periodicals. As such, it is regarded as the global authority for serials knowledge and analysis which comprises more than 383,000 serials from over 90,000 publishers covering 977 subject areas and 200 different languages. Records include searchable TOCs, ISSN, title, publisher, online availability, subject area, language, list prices and more. All Atlantis Press serial publications are indexed in Ulrichsweb.



Google Scholar

Google Scholar is a freely accessible web search engine that indexes the full text or metadata of scholarly literature across an array of publishing formats and disciplines. The Google Scholar index includes most peer-reviewed online academic journals and books, conference papers, theses and dissertations, preprints, abstracts, technical reports, and other scholarly literature, including court opinions and patents. It is estimated to contain more than 160 million documents and continues to cover approximately 90% of all articles published in English. All content published on the Atlantis Press platform is indexed in Google Scholar.

Atlantis Press

Atlantis Press is a professional publisher of scientific, technical and medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

Search

Series: [Advances in Social Science, Education and Humanities Research](#)

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

AUTHORS

129 authors

A. Naway, Fory

Review of Effective School Supervision Practice in Remote/Disadvantaged Area: A National and International Perspective

Abidin, Zainul

Analysis of AVOD Technology for Sharing on the Integrated Network Learning at Middle School

Akbar, Sa'dun

Development of Validation Instrument for Interactive Multimedia Learning Implementation Plan

Akbar, Sa'dun

Ten Minutes for School Environments: Strengthening Character Education Policy in DIY

Aminin, Istiqomah

Influence of Parenting Styles toward Achievement of Theory of Mind in the Late Childhood

Andri Aka, Kukuh

Development of Validation Instrument for Interactive Multimedia Learning Implementation Plan

Andri Wicaksono, Muhammad

GERABA Android-Based Application to Facilitate the Students of TK Tarbiyatul Athfal Al-Falach Malang on Memorizing the Prayer Movements and Reading

Andriningrum, Hana

Improving Student Learning Achievement through Behavior Modification Approach

Angga Rini, Titis

Creating Critical Literacy Skills For Young Learners At Primary School

Anggriayani, Dian

The Techniques Teaching Vocabulary with BCCT Based Learning in Islamic Kindergarten Samarinda (A Case Study at Al-Azhar Syifa Budi Kindergarten)

Anisa, Nur

Analysis of Science and Technology Elements in The Application of STEAM Based Learning (Science, Technology, Engineering, Art, and Mathematics)

Arif Dewantoro, Dimas

Family Environment Support in Early Intervention of Children with Cerebral Palsy

Arif Dewantoro, Dimas

Social Environment of Special Needs in Inclusive Primary School: A Descriptive Research with Phenomenology Approach

Arifin, Imron

The Role of Church and Parent in Early Childhood Education in the Central Highlands of Papua

Badawi, Achmad

Learning Style Preferences of College Student

Bambang Sumarsono, Raden

Implementation of School and Community Relationship Techniques (A Case Study in SDN Karangbesuki 2 Malang, Indonesia)

Bastian, Adolf

Developing Story Book Based on Local Culture for Improving Prosocial Behaviour

Bimbi Mandira, Grezi

GERABA Android-Based Application to Facilitate the Students of TK Tarbiyatul Athfal Al-Falach Malang on Memorizing the Prayer Movements and Reading

Bintartik, Lilik

Perception of Elementary School Teacher Education Students of Universitas Negeri Malang towards the Main Parts of Plants

Budi Wiyono, Bambang

The Influence of Education Level and Income of the Parents on Their Participatic towards the Implementation of Education at Schools

Cahyo Laksono, Wisnu

Mathematics Errors in Elementary School: A Meta-Synthesis Study

Dhiya Amira, Luqyana

Rumah Cerdas Bina Diri for Mentally Disabled in Banturejo Village, Ngantang District, Malang

Duko Ishak, Irmawati

STP Strategy on Guidance and Counseling Services Students in Elementary School

Eka Agustina, Neris

Implementation of School and Community Relationship Techniques (A Case Study in SDN Karangbesuki 2 Malang, Indonesia)

Estu Winahyu, Sri

Perception of Elementary School Teacher Education Students of Universitas Negeri Malang towards the Main Parts of Plants

Fadillah, Siti

Developing Story Book Based on Local Culture for Improving Prosocial Behaviour

Fahrinnia, Via

Mom Worked: Patterns of Parenting and Attachment by Children

Fajar Pradipta, Rizqi

Family Environment Support in Early Intervention of Children with Cerebral Palsy

Fajar Pradipta, Rizqi

Social Environment of Special Needs in Inclusive Primary School: A Descriptive Research with Phenomenology Approach

Fauziyah, Uut

Rumah Cerdas Bina Diri for Mentally Disabled in Banturejo Village, Ngantang District, Malang

Febriana Wati, Ika

MEPE GALON: Counseling Method of Semi-Modern Salt Making in an Effort to Realize the Education Community Concerned with the Salt Crisis

Fitri Untariana, Ajeng

Efforts to Improve the Ability of The Teachers in Development Program for Strengthening Character Education (PPK) in Early Childhood Education (ECE) through

Workshop Activities

Giyanto, Yulia

Rumah Cerdas Bina Diri for Mentally Disabled in Banturejo Village, Ngantang District, Malang

Gonadi, Leni

Improving Questioning Skill through Application of the Scientific Approach to Children 3-4 Years Old

Gonadi, Leni

The Effectiveness of Authentic Assessment with Early Childhood E-Port Information Systems at PAUD

Gunawan, Imam

Implementation of School and Community Relationship Techniques (A Case Study in SDN Karangbesuki 2 Malang, Indonesia)

Gunawan, Imam

Improving Student Learning Achievement through Behavior Modification Approach

Hafidah, Ruli

The Learning Model of Flood Disasters Mitigation Based on Local Culture for Early Childhood in Bengawan Solo River Basin

Hapidin, Hapidin

Developing Story Book Based on Local Culture for Improving Prosocial Behaviour

Hardika, Hardika

Strengthening Education Character of Primary School Educators

Haris, Ikhfan

Review of Effective School Supervision Practice in Remote/Disadvantaged Area: A National and International Perspective

Haryani, Wiwik

Application of Storytelling Method in Early Childhood Education Institute as the Implementation of Permendikbud No. 146 of 2014 in Appendix IV in the Manual Learning of Early Childhood Education

Hermiono, Agustinus

The Role of Church and Parent in Early Childhood Education in the Central Highlands of Papua

Husniyah, Masimul

Nusliyan, Nasihul

The Values of Character in Early Childhood PAUD Nurut-Taqwa South Sangatta I
Borneo

Irham Muzaki, Ferril

International Schools with English as a First Language at Elementary Schools in
Indonesia

Isti'towatul Isti'aroh, Binti

The Victory of Culture Games (VOC-Games): Math-Based Learning Media 3D and
Augmented Reality as A Conservation Culture

Izul Falaq, Fitrah

The Victory of Culture Games (VOC-Games): Math-Based Learning Media 3D and
Augmented Reality as A Conservation Culture

Kartini, Harti

Perception of Elementary School Teacher Education Students of Universitas Negeri
Malang towards the Main Parts of Plants

Khoirunnisa, Rizkha

Rumah Cerdas Bina Diri for Mentally Disabled in Banturejo Village, Ngantang District,
Malang

Kristianingsih, Kristianingsih

Analysis of the Influence of Understanding the Pancasila Values of Teachers on
Learning in Elementary School

Kusuma Dewi, Nurul

The Learning Model of Flood Disasters Mitigation Based on Local Culture for Early
Childhood in Bengawan Solo River Basin

Lappalainen, Harri

Towards Innovation Competences: a Finnish Perspective

Linguistika, Yulia

Evaluating Person and Item Fit in Science Achievement Test of TIMSS 2015 for
Australian Grade 4 Students Using Rasch Measurement

Magta, Mutiara

Lesson Study Based on Local Wisdom and Entrepreneurship of Play and Games
Subject

Mahanani, Putri

A Learning Journal to Improve the Ability of Students in Critical Thinking

Mahanani, Putri

Analysis of the Influence of Understanding the Pancasila Values of Teachers on Learning in Elementary School

Mudiono, Alif

Developing Innovative and Interactive Learning in Elementary School

Mukharoma Meidina, Andini

AC Kids: Art of Cooking for Kids

Munif S, Muh.

The Learning Model of Flood Disasters Mitigation Based on Local Culture for Early Childhood in Bengawan Solo River Basin

Muraveva, Irina

Comparison of Early Childhood Education Curriculum Policies between Russia and Indonesia

Murdiyah, Sri

Improving Student Learning Achievement through Behavior Modification Approach

Murtiningsih, Murtiningsih

Implementation of Student Facilitator And Explaining Model To Support The Active, Innovative and Enjoyable Learning in Social Science Learning in 2013 Curriculum-Based Elementary School

Mutia Ishaq, Putri

The Techniques Teaching Vocabulary with BCCT Based Learning in Islamic Kindergarten Samarinda (A Case Study at Al-Azhar Syifa Budi Kindergarten)

Nasrun, Nasrun

The Influence of Education Level and Income of the Parents on Their Participation towards the Implementation of Education at Schools

Nawawi, Imam

A Learning Journal to Improve the Ability of Students in Critical Thinking

Nindigraha, Nunung

Analysis of Climate Strengthening and Learning Skills through Flipped Classroom

Nur Aisyah, Eny

Efforts to Improve the Ability of The Teachers in Development Program for Strengthening Character Education (PPK) in Early Childhood Education (ECE) through

Workshop Activities



Nur Aisyah, Eny

Development Of Early Childhood Physical Activity Game Model

Nurhayati, Nurhayati

Developing Character in Early Childhood Education Based on Constructivist Learning

Oliver Heyward, Mark

Continuous Professional Development in the Primary School

Onenda, Gena

Improving Student Learning Achievement through Behavior Modification Approach

Palupi, Warananingtyas

The Learning Model of Flood Disasters Mitigation Based on Local Culture for Early Childhood in Bengawan Solo River Basin

Praherdhiono, Henry

Strengthening Performance for Teachers in Early Childhood Education with Heutagogy on the Utilization of Digital Learning Media and Sources

Praherdhiono, Henry

Analysis of Climate Strengthening and Learning Skills through Flipped Classroom

Praherdhiono, Henry

Analysis of AVOD Technology for Sharing on the Integrated Network Learning at Middle School

Pramono, Pramono

Development Of Early Childhood Physical Activity Game Model

Pramono Adi, Eka

Strengthening Performance for Teachers in Early Childhood Education with Heutagogy on the Utilization of Digital Learning Media and Sources

Pramono Adi, Eka

Analysis of Climate Strengthening and Learning Skills through Flipped Classroom

Prihatmoko, Yulias

Strengthening Performance for Teachers in Early Childhood Education with Heutagogy on the Utilization of Digital Learning Media and Sources

Prihatmoko, Yulias

Analysis of AVOD Technology for Sharing on the Integrated Network Learning at

Middle School

Purnama Putra, Arda

Learning Style Preferences of College Student

Purnama Putra, Arda

A Learning Journal to Improve the Ability of Students in Critical Thinking

Purnama Putra, Arda

Analysis of the Influence of Understanding the Pancasila Values of Teachers on Learning in Elementary School

Puspitasari, Lenita

Ten Minutes for School Environments: Strengthening Character Education Policy in DIY

Rahardjo, Budi

The Values of Character in Early Childhood PAUD Nurut-Taqwa South Sangatta East Borneo

Rahma, Adriani

The Learning Model of Flood Disasters Mitigation Based on Local Culture for Early Childhood in Bengawan Solo River Basin

Rahman, Yurni

Evaluation of School-Based Management (SBM) Implementation in Basic School Using Context, Input, Process, and Product Models

Rasyad, Ach.

The Influence of Education Level and Income of the Parents on Their Participation towards the Implementation of Education at Schools

Ridho Wahyu Ismail, Zainur

The Victory of Culture Games (VOC-Games): Math-Based Learning Media 3D and Augmented Reality as A Conservation Culture

Risanti, Atma

Rumah Cerdas Bina Diri for Mentally Disabled in Banturejo Village, Ngantang District, Malang

Rodgers, Adrian

Some Assembly Required: Scaffolding in the Classroom

Rodliyah Ummus Sholihah, Siti

A Q-R Code Art of Cooking for Wid-

Roebyanto, Goenawan

Enhancing The Calculating Estimation Skill of The Students of Grade VI in The Primary School

Rosilia, Putri

MEPE GALON: Counseling Method of Semi-Modern Salt Making in an Effort to Realize the Education Community Concerned with the Salt Crisis

Safiul Ummah, Umi

Social Environment of Special Needs in Inclusive Primary School: A Descriptive Research with Phenomenology Approach

Sahertian, Julian

Development of Validation Instrument for Interactive Multimedia Learning Implementation Plan

Sakinah Nuraini, Ni Luh

Continuous Professional Development in the Primary School

Sakinah Nuraini, Ni Luh

Mathematics Errors in Elementary School: A Meta-Synthesis Study

Samawi, Achmad

Efforts to Improve the Ability of The Teachers in Development Program for Strengthening Character Education (PPK) in Early Childhood Education (ECE) through Workshop Activities

Satriana, Malpaleni

Application of Storytelling Method in Early Childhood Education Institute as the Implementation of Permendikbud No. 146 of 2014 in Appendix IV in the Manual Learning of Early Childhood Education

1

2

>

Atlantis Press

Atlantis Press is a professional publisher of scientific, technical and medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The

Search

Series: [Advances in Social Science, Education and Humanities Research](#)

Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)

PROCEEDINGS OF THE 1ST INTERNATIONAL CONFERENCE ON EARLY CHILDHOOD AND PRIMARY EDUCATION (ECPE 2018)

Review of Effective School Supervision Practice in Remote/Disadvantaged Area: A National and International Perspective

Authors

Ikhfan Haris, Fory A. Naway, Wiwy Triyanty Pulukadang

Corresponding Author

Ikhfan Haris

Available Online September 2018.

DOI

<https://doi.org/10.2991/ecpe-18.2018.18> [How to use a DOI?](#)

Keywords

effective, model, supervision, education, school, special regions (3T)

Abstract

School supervisors have an important role to play in supporting principals and teachers to improve the quality of education delivered in schools, and in strengthening the capacity of principals and teachers to deliver on this goal. Schools in remote and in the outermost areas may only receive one supervision visit per year—if at all. This paper is dealing with a review of effective supervision model for school supervision in remote/disadvantaged area in national and international perspectives. The paper will be focused on the approaches that have been applied by other countries, as well as in

the approaches that have been applied by other countries, as well as in Indonesia, that may be applicable for school supervision in Indonesia's 3 (Tertinggal, Terdepan, dan Terluar) or special regions. In addition, the paper will examine and provide information on approaches to school supervision for remote, disadvantaged and border/outlying areas utilized in other countries and it may be adopted or adapted to the unique environment in the '3T' areas in Indonesia.

Open Access

This is an open access article distributed under the [CC BY-NC license](#).

[+ Download article \(PDF\)](#)

Proceedings

1st International Conference on Early Childhood and Primary Education (ECPE 2018)

Part of series

Advances in Social Science, Education and Humanities Research

Publication Date

September 2018

ISBN

978-94-6252-584-9

ISSN

2352-5398

DOI

<https://doi.org/10.2991/ecpe-18.2018.18> [How to use a DOI?](#)

Open Access

This is an open access article distributed under the [CC BY-NC license](#).

Cite this article

ris

enw

bib

Review of Effective School Supervision Practice in Remote/Disadvantaged Area: A National and International Perspective

Ikhfan Haris
Faculty of Education
Universitas Negeri Gorontalo
Gorontalo, Indonesia
ifanharis@ung.ac.id

Fory A. Naway
Faculty of Education
Universitas Negeri Gorontalo
Gorontalo, Indonesia
ifanharis@ung.ac.id

Wiwiy Triyanty Pulkadang
Faculty of Education
Universitas Negeri Gorontalo
Gorontalo, Indonesia
ifanharis@ung.ac.id

Abstract—School supervisors have an important role to play in supporting principals and teachers to improve the quality of education delivered in schools, and in strengthening the capacity of principals and teachers to deliver on this goal. Schools in remote and in the outermost areas may only receive one supervision visit per year—if at all. This paper is dealing with a review of effective supervision model for school supervision in remote/disadvantaged area in national and international perspectives. The paper will be focused on the approaches that have been applied by other countries, as well as in Indonesia, that may be applicable for school supervision in Indonesia's 3T (*Tertinggal, Terdepan, dan Terluar*) or special regions. In addition, the paper will examine and provide information on approaches to school supervision for remote, disadvantaged and border/outlying areas utilized in other countries and it may be adopted or adapted to the unique environment in the '3T' areas in Indonesia.

Keywords— *effective, model, supervision, education, school, special regions (3T)*

I. INTRODUCTION

One of the Indonesian nation's development orientations is the development of special regions [1]. Special regions are part of priority areas categorized as regions which are underdeveloped, remote, and in outer/frontier (3T areas). 3T is abbreviated from *Tertinggal, Terdepan, dan Terluar*; literally means; the Frontier, Outermost and Disadvantaged Area. Areas classified as remote (*terpencil*), disadvantaged (*tertinggal*) and on Indonesia's borders or outlying (*terdepan/terluar*) [2].

This development orientation is stated in the Government's National Priority Agenda i.e. to develop Indonesia from the suburban areas by strengthening regions and villages within the Republic of Indonesia [3]. This is part of the equal national development pride. For that, all development sectors must be integrated to improve public welfare and prosperity, especially in the 3T regions related to the education sector.

Education development is included in one of the development sectors in special regions that should be developed and managed contextually, according to the 3T region situation and condition. Education quality improvement in each educational unit in the special regions, both massively and organizationally, is focused on the role of the principal. The principal is a teacher with additional tasks in a principal position. This means, aside from teaching tasks, the person also bears tasks as a school leader. On the

other hand, development among schools is largely done by the school supervisory function [4].

The school supervisor is part of the overall educational personnel that is strategically positioned in national education quality improvement [5]. To achieve its main task, the school supervisor must be equipped with personal competencies such as managerial and academic supervision, education evaluation, research and development and social capabilities [6].

In Indonesia, the problem of education in special regions is more complex than that in other advantage areas, among them shown by the data of school accessibility by student or disparity/education equality [1]. This paper provides information on approaches to school supervision for remote, disadvantaged and border/outlying areas utilized in other countries and in Indonesia that may be adopted or adapted to the unique environment in the '3T' areas.

II. SCHOOL SUPERVISION: CURRENT ROLES AND IMPLEMENTATION

School supervisors have an important role to play in supporting principals and teachers to improve the quality of education delivered in Indonesia's schools, and in strengthening the capacity of principals and teachers to deliver on this goal [5].

In Indonesia's "3T" areas" extremes of geography and lower levels of financial and human resource capacity are preventing effective supervision occurring. 3T' areas are areas classified as remote (*terpencil*), disadvantaged (*tertinggal*) and on Indonesia's borders or outlying (*terdepan/terluar*) [2]. Schools in remote and in the outermost areas may only receive one supervision visit per year – if at all. But if the Ministry's aim to reduce the disparity between '3T' areas and the rest of Indonesia is to be achieved, the school supervisor function (as one key input to better schools) needs to be performing much more effectively than it is currently.

Education supervision is a strategic process that assures quality education for all Indonesian students. With the support of the School Supervisor, the school principal, teachers and community ensure students develop to their full potential to become faithful religious citizens who believe in God Almighty. Students graduating will be healthy, educated, skilled, creative, and independent citizens who are democratic, accountable, and possess noble intentions that embrace the cultural systems of their tribe [7]. Through the

process of formative supervision, educational organizations including schools commit to contributing to bringing the nation to its ideology through the achievement of the eight education national standards.

School supervisors are responsible for reviewing principal and teacher performance, student academic and wellbeing outcomes, curriculum implementation approaches, financial and administrative management, maintenance of buildings, the health of the learning and work environment, and adequate resourcing of the school [6]. They will evaluate and make judgments referencing the Ministry of Education and Culture policy and direction, the National Education Standards, the National Education Minimum Standards, and the National Principal and Teacher Standards. They will use the Ministry of Education and Culture guidelines for Principal and Teacher Appraisal in making judgments about overall performance, as well as the principal and individual teacher's impact on school improvement and student improvement annually.

The school supervisor will analyze data and review evidence to ensure their judgments and those of the school principal, teachers, and community members are transparent and in line with public accountability principles (Permenpan RB No. 21/2010 Article 188 point 1 & 2) [8]. With the support of the community, they will provide constructive feedback and formal recommendations to the appropriate local governing bodies and Divisions (Law No. 20/2003 Sisdiknas Article 66) [7]. The school supervisor is responsible for providing leadership and guidance to the school principal, teachers and community members, and delivering professional learning programs in regards to the Ministry of Education and Culture and school priorities.

The principal is responsible for leading the academic program and management of the school. They liaise with the School Supervisor, their staff and the community to ensure rigor, transparency and quality school and student outcomes [2], [7]. They are responsible for school supervision program plans, implementation, and evaluation. Supervision is conducted collaboratively through face to face meetings, observation and the through the gathering of evidence to inform judgment. The principal is responsible for leading the management of the school through the development of the school plan with reference to the Minimum Service Standards, National Education Standards, and the National Principal and Teacher Standards.

III. SUPERVISION OF SCHOOL

School supervision leads to improved teaching and learning via two intermediate mechanisms: (1) setting expectations for schools and stakeholders. Research shows that supervision criteria and procedures influence schools and their stakeholders to align their views/beliefs and expectations of what constitutes good education to the standards in the supervision framework [9]. Schools and stakeholders are expected to use these standards in their daily management of, and or activities in the school, and (2) schools and stakeholders accepting supervision feedback. Schools align their education to the standards they failed to meet during the latest supervision visit as outlined in supervision feedback. Schools use supervision feedback when conducting self-evaluations and when taking improvement actions. Likewise, stakeholders are expected to

use the supervision feedback (as publicly reported) to take actions that will motivate the school to improve [9].

These two intermediate mechanisms can improve the self-evaluations of schools; building schools' capacity to improve that, in turn, will lead to more effective teaching and learning conditions. Likewise, improvement actions will (when successfully implemented) lead to more effective school and teaching conditions. In turn, this process, should, logically, result in higher student achievement.

A review conducted by the Ministry of National Education in 2015 regarding school supervisors in special regions (3T) identified several issues, among others: (1) lack of capacity building for units of education by the school supervisor; (2) lack of school supervisor visits to target schools due to geographical and infrastructure obstacles, such as the surrounding terrain, distant school location, and limited transportation; and (3) lack of operational funds to implement supervisory tasks in the special regions [10], [11]. In addition, the review also identified causes for supervision problems in the special regions, such as (1) number of school supervisors is less compared to the number of target schools which will supervise by supervisor; (2) the education background and work experience of supervisor do not match the main tasks of a school supervisor; (3) the local Provincial/ District Education Office (PEO/ DEO) offers not enough opportunity to train and build the competency of school supervisors; (4) lack of operational funding for school supervision; (5) lack of monitoring on Minimum Service Standard (MSS) for the implementation of school supervision by the central and local government; (6) lack of community/ school committee involvement in supporting the school supervision implemented in schools; (7) the distance between target school and school supervisor's office (local PEO/ DEO) and (8) the limited transportation facilities for school supervision [10], [11].

IV. INTERNATIONAL AND LOCAL APPROACHES IN SCHOOL SUPERVISION: AN EXAMPLE

These approaches acknowledge the planning to date by the Special Regions Committee. These approaches recognize the geographical isolation of the Special Regions as well as the significant budget challenges faced by the School Supervisor, the distances to schools and the transport challenges, and the lack of infrastructure to support a quality supervision process.

They emphasize that ICT in education has a multiplier effect throughout the education system, by enhancing learning and providing students with new sets of skills; by reaching students with poor or no access (especially those in rural and remote regions); by facilitating and improving the training of teachers; and by minimizing costs associated with the delivery of traditional instruction.

Beyond sub-regional differences, the internal digital divide of developing countries has also increased significantly as urban centers quickly adopt ICT while it remains out of reach for rural and remote regions. Bearing these caveats in mind, ICT in education in Asia can be viewed from two very different perspectives. The first reflects a development discourse that stresses the role of ICT in eliminating the digital divide by reaching the unreached and providing support to those who cannot access essential infrastructure, trained teachers and other quality educational

resources. The second perspective adheres to an e-learning paradigm and is a response to the emerging knowledge society where ways of teaching and learning are evolving at a rapid pace to foster learner-centric educational environments, which encourage collaboration, knowledge creation and knowledge sharing. While countries are admittedly at different stages of integrating ICT in education, ultimately both perspectives will be increasingly relevant for countries in Asia.

The following is a summary of approaches that have been applied by other countries, as well as in Indonesia, that may be applicable for school supervision in Indonesia's 3T or special regions. Information is provided on the approach, which countries it has been used in, whether it is used for managerial or academic supervision, and requirements for implementation.

A. Professional Learning Approaches

Professional learning is imperative in all professional organizations and vital in schools where school and student improvement policies and programs continue to be updated. Remote principals and staff meet the daily challenge of not only being isolated geographically but also having minimal access to regular electricity, and communication and information technologies [12], [13]. In countries that face such issues the following solutions have been implemented:

- Philippines: Microsoft has a project for rural areas where content and curriculum can be downloaded to a Windows phone and then played through a television or other device and reloaded when educators travel to a larger city.
- Indonesia: Microsoft has partnered with the Ministry of Education and Culture on the *e-Sabak* project for student textbooks. This currently includes using One Note to access information anywhere, anytime and load to One Drive when there is an opportunity to do so. This same project would enable professional learning programs to be loaded regularly to a school or teacher laptop and smartphone. Updates could be completed each time the Supervisor meets with the Principal allowing new material to be shared every three to four months.
- In Indonesia, Zenius has developed an online platform for teacher professional development. The platform provides a mix of free and paid content: <http://zeniusprestasi.com>.
- In Australia, apps are loaded onto smartphones that allow exemplars of:
 - Teacher and Principal standards
 - Curriculum implementation
 - Quality teaching processes
 - New policy implementations e.g. child safety
- In Australia, the Solomon Islands, Tonga and Indonesia television such as TV Edukasi is used to distribute professional content via satellite. TV-Edukasi (TV-e) broadcasts animated units of instruction focused on the primary curriculum. The e-dukasi.net Website offers forums, recommended

Websites, learning activities and exam-preparation resources for Indonesian secondary students. This tool could also be used to facilitate content for principals and teachers.

- In Australia, the Solomon Islands, Tonga, Fiji, and Vanuatu radio is used to distribute professional content.
- In many countries, PD on a Stick (USB) has been used and this could be transferred regularly by the School Supervisor or by mail or by drone.
- In Bangladesh – with support from the nongovernmental development organization, BRAC – introduced 17 mobile ICT laboratories containing laptop computers, cameras, multimedia projectors, etc. to cover 1,000 schools in remote areas [12]. BRAC introduced Multimedia Classrooms in secondary schools, using one laptop with an internet connection and a multimedia projector per classroom. This approach proved to be much more affordable than a full-fledged computer lab and thus economically more feasible.
- In Sri Lanka – through its Nensala Project, Sri Lanka established over 700 rural telecenters or "Nensalas", which are managed and supervised by the Nensala Community Development Task Force to build ICT skills and impart ICT education in school curricula [12].

B. Approach with Offsite Meetings with Principals

It is usual that the school year starts with the School Supervisor meeting with their school principals together at an agreed site for 2-3 days. This could be at the district education office, school cluster, or another agreed location. During this time new policy and practices are discussed, professional development is completed together, technologies are updated, data collections and evidence gathering timelines are established for the year, and individual meetings are completed as part of the Principal Appraisal process. This meeting time provides quality input for the first face to face school-based meeting.

These meetings could be held twice a year to (a) provide a network for principals in which to share practice; (b) disseminate Ministry of Education and Culture programs and policies; (c) fulfill supervision requirements particularly in regards to the National Education Standards and the Principal and Teacher Standards and (d) complete professional capacity building exercises coach principal supervisory practices establish formats for calendared online/offline meetings (e.g. for coaching, providing advice) when they return to school.

C. Approach with Using Data Collection and Analysis for School Improvement

In Indonesia data is currently collected through 31 instruments along with observations collected whilst at the school. The Committee has already identified that these data collections are entered generally on paper by the school and the Supervisor. The Supervisor then spends an extraordinary amount of time manually analyzing data into a report that is lodged with the local governing authority. The committee noted that this report is retained by the local governing

authority, is not shared with the Ministry of Education and Culture and is not acted upon. The report has no impact and is a redundant exercise.

In Australia and in a number of countries such data is loaded into a database that as its endpoint provides a single point of truth for the student, the principal, the teacher, and the supervisor. That means that any data collected about an individual is attributed back to that individual. This in time provides a cumulative record about each student, principal, teacher, and supervisor and provides agreed evidence on which to make judgments.

Technically data mining tools can be loaded as apps to the principal's laptop and downloaded when they come to the meetings twice a year. Data can also be uploaded when the School Supervisor visits the school. There is a backup server in the school. Cloud technologies should be considered. Alternatively are: (a) if data loads are required more regularly Drones can pick up and drop off memory sticks and materials up to 2 kilograms, or it can be sent by mail or via other school personnel visiting district centers, and (b) data can be stored offline until online capability is available as mentioned before.

This kind of transmission is seen as more helpful as in areas such as Papua where the Telkom's (Indonesian telecommunication) transmission capacity for the entire province is 20 Mbps— compared, say, with a typical OECD residential connection of 8 Mbps [12]. As a result of these factors, data transfer speeds on the internet are slow and of poor quality at all times, compared to international and even national norms, and in many instances make Web access impossible. By passing the network for such things as data transmission is seen as sensible enabling small opportunities for internet users to be used for other communication priorities.

D. Use of Community to Monitor School Accountability and Performance as Supervision Approach

KIAT GURU (*Kinerja dan Akuntabilitas Guru* - Teacher Accountability and Performance). The purpose of KIAT Guru (a TNP2K initiative) is to improve basic education service delivery and student learning outcomes in rural and remote areas. As this is a complex endeavor influenced by myriad factors, experimentation, adaptation, and learning were essential to developing and scaling up appropriate solutions. TNP2K (National Team for Acceleration of Poverty Reduction) is an institution established to coordinate the acceleration of poverty reduction across sectors and stakeholders. Established by the Decree of the President of the Republic of Indonesia Number 15/ 2010, TNP2K sits under the Secretariat Office of the Vice President of the Republic of Indonesia. To this end, KIAT Guru implemented several interventions that combine the following two mechanisms: Community Empowerment Mechanism (CEM), which provides community members with an explicit role to monitor and evaluate teacher service performance, and to ensure teacher accountability; and Pay for Performance Mechanism (PPM), which tie payment of special allowance with availability and/or quality of teacher service delivery.

TNP2K partnered with the Ministry of Education and Culture and the district governments of Ketapang (West Kalimantan), Kaimana (West Papua) and Keerom (Papua).

The Pre-Pilot Phase developed, tested and improved two main implementation mechanisms and five evaluation instruments, with inputs from stakeholders at different stages. This phase was conducted between March and October 2015.

In order to send information and reports to and from remote villages to the district and/ or national offices, and to collect, store and manage them, several alternatives were considered, particularly for areas with no or unstable telecommunication signal. At the beginning of the design, the use of the following interconnectivity and devices were considered according to the following priority: (1) in villages where there are Wi-Fi/ 3G signal, transfer of information and report to be managed using mobile-phone; (2) where there is a telecommunication signal, transfer of information in SMS to be managed using a mobile phone; (3) where there is no telecommunication signal, transfer to be conducted through Single Side Band (SSB) radio or other locally utilized telecommunication; (4) at the worst case scenario, sub-district facilitators to collect the information through USB, compile it in his/her laptop and send the information when they find the connection, and (5) at the very remote area there is option to provide portable and Fixed Satellite.

TNP2K developed, implemented, and revised four innovative mechanisms and instruments to support the interventions and evaluations, with inputs from stakeholders. They included: (a) Government regulations to enable community input and evaluation of education service delivery and payment of APBD teacher allowances based on performance; (b) KIAT Kamera, a tampered-proof Android-based application that provides accurate data of daily teacher attendance; (c) Community Score Card (CSC) that specifies between 5 to 8 indicators of education service availability and quality; and (d) Student Learning Assessment instruments, consisting of simple diagnostic and evaluation instruments for basic literacy and numeracy, which place student's level of competency along a continuum based on 2006 national curriculum.

In relation to staff attendance, a Manual Absence Form (MAF) was utilized, as mandated by the district governments and attendance was recorded on a daily basis using KIAT Kamera, a tampered-proof Android-based camera application. At the end of each month, the community representatives filled out School providers' Presence Verification Form (SPVF) that crossed checked the results from KIAT Kamera against MAF. The MAF is also needed to encounter possible malfunctioning of KIAT Kamera. For evaluating the quality of service indicators, the community representatives were informed with a few means to monitor teacher service performance: by interviewing students, by conducting direct observations, or by checking on written documents. Their evaluations were recorded into the CSC on a monthly basis.

Evidence from the pilot showed that teacher presence in the classroom and student learning outcomes in 31 participating schools improved. In addition, surveys conducted by PSKK-UGM (*Pusat Studi Kebijakan dan Kependudukan–Universitas Gadjah Mada*) indicated that teacher presence in classrooms has increased from 48.5% to 60.1% in Keerom and Ketapang. In 31 participating schools, learning outcomes in basic literacy indicated that more students achieved grade level competencies, with an increase from 16.9% to 35.3%. Student illiteracy had decreased from

27.9% to 12.7%. In basic numeracy, more students achieved grade level competencies, with an increase from 6.2% to 22.2%. Student innumeracy had decreased from 5.7% to 1%. The Pre-Pilot Phase found that communities need to have sufficient willingness to participate in improving education service delivery [14].

Based on the KIAT Guru Pre Pilot, Ministry of Education and Culture has requested KIAT Guru to be scaled up to a Pilot Phase to provide evidence-based policy recommendations for the most effective implementation options to improve basic education service delivery in rural and remote areas. KIAT Guru Pilot Phase will be implemented in 200 rural and remote villages in five districts starting in mid-2016 until December 2017.

E. Approach to Scheduling Visits of Schools to Target Schools/Teachers in Most Need of Improvement

A report provided to the Zanzibar Ministry of Education and Vocational Training recommended a program of school supervision using a two-phased approach to implementation [15]. The Solomon Islands Ministry is also exploring a two-phase approach with the first phase to embed and pilot the new supervision model, and the second phase to move to full implementation [16].

The first phase proposed in Zanzibar reflects the processes already embedded in Indonesia. The development of legislation specifying the tasks and roles of the school supervisor, how the school supervisor evaluates schools, which supervision standards they include in their work, which consequences or follow-up are related to their work and which budget is guaranteed to perform these duties have been implemented [15]. The first phase also proposed training for school supervisors on how to objectively evaluate the quality of teaching and learning in schools, how to provide effective feedback and how to store and analyze data on quality of schools to evaluate trends in specific quality areas over a longer period of time. They also identified the need for an effective feedback and reporting mechanism in which supervision feedback is differentiated and provided to different stakeholders and followed up in repeated supervision visit.

The second phase proposed differentiated scheduling of visits to schools to target schools and teachers most in need of improvement, as follows: (1) scheduling visits to schools. An effective schedule of supervision visits targets the schools that are most in need of improvement and provides information to the actors in these schools that are in charge of implementing these improvements. The supervisor develops a schedule of regular supervision visits to generate a database of school quality. This database is used to target customized supervision visits to failing schools in which specific standards are evaluated. (2) Scheduling of visits of individual teachers: observations of teachers during school visits need to be scheduled in such a way to provide an assessment of the quality of teaching on the school level as well as provide assessments of (some) individual teachers. The first assessment modus of the quality of teaching of the school requires the selection of a representative sample of teachers, while the second modus could also target specific teachers (e.g. new teachers, teachers who want to be promoted to principals or section leaders, or teachers who have been identified as failing in previous visits).

In scheduling a visit to schools, the school supervisor of education needs to have an overview of the teachers in the school according to subject, experience, prior performance of teachers, and potential career development wishes of teachers to prepare a smart schedule of which teachers to observe that meets both selection criteria. (3) Use of consequences (and reward) to encourage change: Each supervision visit should have clear consequences for schools and teachers to promote impact of supervisions. Schools and teachers who perform well should be rewarded and appreciated. Rewards can include a certificate of appreciation/reward for schools and/or teachers and outstanding performance should be awarded through additional increments to teachers' and principals' salaries.

Consequences to address failure in schools should follow an 'intervention pyramid' where the first assessment of failure leads to support, advice and additional monitoring. Also, the principal needs to address how he/she will improve any shortcomings in the school's development plan. In case the failure persists, more severe sanctions will be enacted. These may include withholding an annual increment on teachers' and/or principal' salaries. Such consequences should only be enacted when the failure is attributable to the school/teachers, and not for example to factors outside of the school's/teacher's control (e.g. lack of textbooks or lack of teachers). (4) Feedback: use information from regular supervision visits to publish an annual supervision report on the state of education for Ministry of Education and Culture as well as individual school reports.

V. CONCLUSION

This paper presents some examples of school supervision models used in other countries that could adapt and/or adapt to improve the effectiveness of school supervision in remote (*terpencil*) and disadvantaged (*tertinggal*) schools, and those schools lying on and near Indonesia's borders (*terdepan/terluar*). These are known as 3T areas. The review has considered a range of national and international examples. The review assessed country reports and various literature evaluations of school supervision from Australia, Bangladesh, the Philippines, the Solomon Islands, Sri Lanka, and Zanzibar as well as Indonesia. In reviewing the policies and practices from other countries it became quickly apparent that many are on the same learning journey as Indonesia and that Indonesian supervision policies and guidelines were comparable with many of these countries.

REFERENCES

- [1] B. P. Statistik and U. Bappenas, "Proyeksi Penduduk Indonesia 2010-2035," *Jkt. Badan Pus. Stat.*, pp. 1-472, 2013.
- [2] R. Indonesia, "Peraturan Presiden Nomor 131 Tahun 2015 tentang Penetapan Daerah Tertinggal Tahun 2015-2019," *Sekr. Kab. RI Jkt.*, 2015.
- [3] J. Widodo and J. Kalla, "Jalan Perubahan untuk Indonesia Yang Berdaulat," *Mandiri Dan Berkepribadian-Visi Misi Dan Program Aksi*, 2014.
- [4] R. I. Kemendikbud and R. I. Kemenag, *Pengembangan Keprofesional Berkelanjutan Kepala Sekolah/Madrasah*. Jakarta: Pusat Pengembangan Tenaga Kependidikan, Badan PSDMPK dan PMP, 2014.
- [5] N. Sudjana, "Pengawas dan Kepengawasan: Memahami Tugas Pokok, Fungsi, Peran dan Tanggung Jawab Pengawas Sekolah," *Bekasi Binamitra Publ.*, 2012.
- [6] D. T. Kependidikan, *Panduan Pelaksanaan Tugas Pengawas Sekolah*. Madrasah, 2009.

- [7] P. R. Indonesia, "Undang-undang Republik Indonesia nomor 20 tahun 2003 tentang sistem pendidikan nasional," *Jkt. Pemerintah Repub. Indones.*, 2003.
- [8] I. L. Lubis, "Implementasi kebijakan beban kerja pengawas sma di kabupaten padang lawas (studi tentang kebijakan Permenpan RB no. 21 tahun 2010 pasal 6 tentang beban kerja pengawas)," PhD Thesis, UNIMED, 2016.
- [9] M. C. Ehren, H. Altrichter, G. McNamara, and J. O'Hara, "Impact of school inspections on improvement of schools—describing assumptions on causal mechanisms in six European countries," *Educ. Assess. Eval. Account*, vol. 25, no. 1, pp. 3–43, 2013.
- [10] K. P. Indonesia, "Laporan Akuntabilitas Kinerja Kementerian Pendidikan dan Kebudayaan 2015," 2016.
- [11] A. R. Baswedan, "Gawat darurat pendidikan di Indonesia," in *The Emergency of Indonesian Education*. A paper delivered at the meeting between Ministry and Head of Education Offices Indonesia-wide in Jakarta, on December, 2014, vol. 1.
- [12] O. Publishing, *OECD science, technology and industry outlook 2010*. OECD Pub., 2010.
- [13] W. B. Group, *World development indicators 2014*. World Bank Publications, 2014.
- [14] A. Dwiyanto, *Teladan dan pantangan dalam penyelenggaraan pemerintahan dan otonomi daerah*. Pusat Studi Kependudukan dan Kebijakan, Universitas Gadjah Mada, 2003.
- [15] A. S. Suleiman, Y. Yat, and I. Iddrisu, "Education Policy Implementation: A Mechanism for Enhancing Primary Education Development in Zanzibar," *Open J. Soc. Sci.*, vol. 5, no. 3, p. 172, 2017.
- [16] H. Pillay, S. Carrington, J. Duke, M. Tones, S. Chandra, and J. Heeraman, *Mobilising school and community engagement to implement disability-inclusive education through action research: Fiji, Samoa, Solomon Islands and Vanuatu*. Queensland University of Technology, 2015.