Book Review

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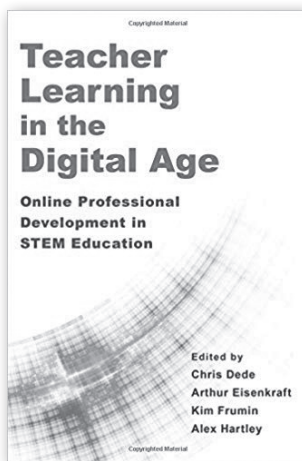
Book name:	Teacher Learning in the Digital Age
Editors:	Chris Dede, Arthur Eisenkraft, Kim Frumin, Alex Hartley (2016)
Publisher:	Harvard Education Press

"Teacher Learning in the Digital Age" provides an inclusive perspective of online teacher professional development and detailed effective models of online and blended development in STEM courses. This book describes exemplary educational practices with critical lessons learned for practitioners, designers, educators, researchers, and policymakers interested in the professional development and instructional innovations for improving classroom instruction and student achievement.

Dr. Chris Dede, one of the key editors on this book, is the Timothy E. Wirth Professor in Learning Technologies and former chair of the Learning and Teaching Department at the Harvard Graduate School of Education (HGSE) who has contributed the 2010 National Education Technology Plan and membered the US Department of Education's Expert Panel on Technology. He unquestionably has an influence in engaging the teacher development and enhancing

technology to support teacher learning in the US. He and other editors gathered original articles to seek answers to the questions what advantage of the ongoing evolution of digital technologies, what works and what doesn't and for whom. The answers highlighted various models of educators in the field of professional development with focusing on Science, Technology, Engineering, and Mathematics education.

The chapters of this book are grouped into four sections:

As part of the introduction section, Barry Fishman, a professor from the University of Michigan, explores the possible futures of online teacher professional development, the exemplary model with trends and his newest research in chapter 1.

Section I Courses begins with chapter 2, Susan Doubler and Katherine Paget then introduce web-based videos named Talk Science that help teachers learn more about the science concepts and strategies. In chapter 3, MOOC-Ed with four major design principles: multiple voices, self-directed learning, peer-supported learning, and job-connected learning is built on prior works of Glenn Kleiman and Mary Wolf to help teachers meet their professional learning needs. Ruth Schoenbach and her associate provide the immersive online iRAISE (Internet-based Reading Apprenticeship Improving Science Education) course that was true PLCs for STEM

teachers in chapter 4. In chapter 5 The American Museum of Natural History (AMNH) centerpiece program Seminars on Science designed by Robert Steiner and his work team, AMNH scientists, as a series of massive open online courses to increase teacher's understanding and experience with authentic science and to inspire educators to become lifelong learners in a discussion-based asynchronous learning environment.

Section II Curriculum Support, Abigail Jurist, Arthur Eisenkraft, and Erica Fields develop the Active Physics Teacher Community (APTC) model to help teachers use the Active Physics Curriculum and provide formal instruction directly related to the lessons compared the effectiveness with other teachers using the same lesson plans and curriculum in chapter 6.

In chapter 7 The National Science Foundation (NSF) has funded the Electronic Teacher Guide (eTG) Project, under the direction of Jacqueline Miller and Katherine Paget, with the goal of developing digital version of a print teacher guide composed of three characteristics: digital tools, modes of a teachers' work life and levels of interaction with the materials. The teacher guide as a powerful resource is developed to facilitate implementation of the curricula, student understanding, build scientific skills, assist professional learning with new educational strategies.

Barbara Zahm and Ruta Demery design, develop, and test a cyberlearning professional development model in chapter 8 that could be readily and inexpensively distributed to school districts. This model or CyberPD is included four key pedagogical elements: driving questions, learning by design, sustained inquiry, and engagement in scientific reasoning and practices to help teachers implement the research-based Project-Based Inquiry Science program and, in return, help continue students' interest in science and engineering by involving them in relevant experiences.

Section III Resources and Strategies, in chapter 9 Al Byers and Flavio Mendez from the National Science Teachers Association (NSTA) give a summary of the available resources on NSTA Learning Center, where more than 170,000 teachers spending many hours completing web modules, studying online course, joining in web seminars and virtual conferences, and sharing online digital resources.

Kim Frumin, a doctoral candidate of HGSE and Chris Dede explain the important role of moderators in the effective functioning of online professional learning communities in chapter 10. The moderators play the significant roles as facilitators of community discussions and member engagement. To support and encourage online communities, they advise that the moderators should facilitate organization, welcome newcomers, encourage contributions, support top contributors, foster commitment, address problems and model good behavior.

Raymond Rose brings recognition to the unique viewpoints of making online professional learning accessible for the disability by examining historical background, discussing the current state of online accessibility, and offering effective recommendations to enhance course accessibility in chapter 11.

Section IV Summary Insights, chapter 12, by Steven Schneider and his fellows, illustrate the evolution of WestEd from face-to-face approach into various online deliveries by providing five cases of online professional development at WestEd. Each case includes in-depth courses, curriculum implementation wraparounds, and hybrid and ongoing support models.

Last but not lease, Dr. Chris Dede and Dr. Arthur Eisenkraft conclude the insights that coeditors have gained through studying the professional development models presented in the twelve chapters of this book.

Professional development is apparently the best expectancy we all have for optimistic sustainable change in curriculum, instruction, and assessment. By the same token, advances in technology can lead to new professional development and teachers must also alter their practices as the types of students they serve. Finally, it is important to note that the book **"Teacher Learning in the Digital Age"** will help all contributors to better understand alternative options for professional development and become skilled, knowledgeable educators who can lead their own students to understand STEM knowledge and skills more deeply and equip their ability to apply these in real-world situations for the digital age.

Guidelines for Writing and Sumitting Original Manuscripts for Publication in Journal of Multidisciplinary in Social Science

Journal of Multidisciplinary in Social Science is an academic publication that aims to publish manuscripts such as original articles, review articles, and book reviews in the fields of Food, Medical Science and Nutrition, Agriculture, Environmental Science and other related fields. The journal is published thrice annually. All manuscripts accepted for publication are copyrighted by Suan Dusit University; reproduction, in whole or in part, requires written approval from Suan Dusit Unversity. Excluding errors incurred during the printing process, all content contained within articles is the author's responsibility.

Publication Process

1. The journal accepts original manuscripts for consideration, from January to December.

2. The editorial board adjourns to consider the merits or submitted manuscripts and the scope of the journal. During this phase the integrity and accuracy of the manuscripts content is assessed.

3. An editorial letter is issued to the author for manuscripts that the editorial board deems inappropriate for publication. If the editorial board approves the manuscripts, an editorial letter will be sent to the author and the article will be subjected to peer review.

4. Articles that are deemed appropriate for publication are subjected to peer review by a panel of three experts in the appropriate field. In order to be deemed appropriate for publication, an article must be by recommended two of the three experts.

5. The qualitative assessments of the expert panel returned by the manuscript's author. The author is expected to make the appropriate alterations indicated by the experts' feedback.

6. The author returns the edited document; the editorial staff examines the changes to make sure they are congruent with the experts' recommendations as well as the journal format.

7. The revised version is granted the University's recognition of "Accepted" for publication status with the Journal of Multidisciplinary in Social Science Stamp on every page. Information regarding publication status (Accepted) is located on the journal's website (http/ research dusit ac.th/new/e-Journal)

8. The editorial tearm conducts an accuracy check for all articles before sending the manuscripts to the printer to create a draft journal issue.

9. The editorial board conducts a review of the draft journal issue before publication on the journal's website (http://research.dusit.ac.th/new/e-Journal). Suan Dusit University will place their official seal of approval on each page of the manuscript and to verify before formal publication.

10. Upon approval by each author, the final version of the journal will be

published as a physical journal and online publication, accessible on website (http://research.dusit. ac.th/new/e-Journal). Together with sending a physical journal to peer reviews, authors and involved sectors.

Publication Criteria

1. The original manuscript is concise and interesting to the academic community.

2. The content of the manuscript represents quality and theory of the discipline and also possesses knowledge with practical applications.

3. The manuscript's content is consistent with the aim and scope of the journal.

4. Manuscripts submitted to Journal of Multidisciplinary in Social Science must not have been published previously in or actively involved in the publication process of another journal.

5. All content within the manuscript must be the product of the author himself. Any use of intellectual property within must be appropriately credited to its original authors.

6. The author must comply with the writing style established by Journal of Multidisciplinary in Social Science.

7. There are four levels of assessments given to reviewed manuscripts:
    7.1 Requires minor or no revisions prior to publication.
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    7.3 Requires intensive editing and revisions followed by a future evaluation.
    7.4 Unsuitable for publication

In order to be assigned the "Accepted" status, an article must be assessed as "Requires minor or no modification prior to publication" by two of the three experts from the peer review process.

Formatting Guidelines

It is the author's responsibility to format manuscripts to the standards of Journal of Multidisciplinary in Social Science. The details of format style are contained herein,

    1. Format
      1.1 Single page printing on A4 paper with a width of 19 cm and height of 26.5 cm. The vertical and horizontal spacing from the margins must be 3.5 cm and 25 cm, respectively.
      1.2 Typefaces and layout: English must be typed using TH SarabunPSK using Microsoft word. Specific font format guidelines are as follows.
        1.2.1 The header contains the page number, aligned on the right side, in 12 pt. font.
        1.2.2 The title in English languages must be 16 pt. font, bolded, and center aligned. The title should not exceed two lines of text.
        1.2.3 The author's name in English language must be typed 14.5 pt. font and centered below the title. Asterisks (*) should proceed the authors' names which is correspond to the appropriate author.
        1.2.4 Affiliations should match each author with their appropriate affiliated institutions and organizations. In case of different affiliations, superscript numbers should follow the surname1 and affliation1.
        1.2.5 A footnote must be placed on the first page of the article with the text "*Corresponding Author", the next line of text should contain "e-mail", and the final line "**Affiliations" which specifies funding sources and agencies, for example "This research was supported by research grants from Suan Dusit University".
        1.2.6 "Abstract" in English must be 14.5 pt. font, bolded, left aligned, and placed below the Thai keywords section. Abstract text must be 14 pt. font, with 1 tab indentation from left and right margins.
        1.2.7 "Keywords:" should appear in English language in 14.5 pt. font, placed beneath the English abstract text and be aligned with the left margin. English keywords must be 14 pt. font, and should not exceed four words. Each keyword should be separated by a comma (,) and space.
        1.2.8 Regardless of language choice, the main text headings used throughout the paper must be 14.5 pt. font, bolded, and aligned with the left margin.
        1.2.9 Bulleted items must appear as 14 pt. font, bolded, and be indented 1.5 tabs from the left margin.
        1.2.10 Body text must appear as 14 pt. normal font, and be indented 1 tab from the left and right margins.
        1.2.11 "References" must be 14.5 pt. font, bolded, and be aligned with the left margin. Individual entries must be 14 pt. font and should follow American Psychological Association (APA) formatting guidelines. Any lines of text for a single entry that exceed the first line should use a "hanging indent" of 1.5 tabs from the left margin.
        1.2.12 Authors' names in Thai must be 14.5 pt. font, bolded and be aligned with the left margin. Name should contain Mr., Mrs. and academic title for each author. Affiliations should be below in both Thai and English as 14 pt. font. An address must be listed for each author.
      1.3 An appropriate page length for publication in the Journal is approximately 15 pages.

2. Citing

Should follow American Psychological Association (APA) formatting guidelines. Guidelines for references can be found on the journal's website: http//research dusit ac.th/new/th/pr/

3. Ordering of Titles in Journal of Multidisciplinary in Social Science

The written manuscript may contain only English. The content should be easy to understand and clear. If the author uses abbreviation, full word must appear before any abbreviation.

3.1 The title should be brief, the length should not exceed 100 characters.

3.2 The authors if there are more than six authors only the first author is listed, followed by "et al."

3.3 Affiliated entities associated with the author should appear in English languages.

3.4 The abstract must be written in English language. The abstract should briefly summarize the research and not exceed 250 words or 15 lines of text.

3.5 The "Keywords" section must contain no more than four keywords that allow for appropriate searching and selection based upon the article's topic.

3.6 The "Introduction" section should provide background information relevant to the research and provide information regarding the manuscript's content.

3.7 A statement of purpose should accompany the article to explicitly state the purpose of the study.

3.8 The framework clarifies the dependent and independent variables examined in the study.

3.9 The "Methodology" section delineates the procedures, how the research was conducted, sampling method (i.e. simple random samples) and population, and the creation and development of research tools used for data collection and analysis.

3.10 The "Results" section presents data obtained during the research and may be displayed as tables, graphs, illustrations, and accompanying explanations. Tables should be not have left and right borders and are normally black and white printed. No more than five tables should be present in the "Results" section. Pictures within the section should be clear and use simple black and white coloring with an accompanying caption, the author wishes to use colors for any item they may do so; however, the author will be responsible for the additional costs of color printing.

3.11 The "Discussion" section should include a summary of the findings and address whether or not the data support the research hypothesis and compare research findings to other similar research works.

3.12 The "Suggestions" section should provide recommendations for the application of the current work as well as potential areas for future research inquiries.

3.13 A final section should include contact information, address and e-mail, for each author. The list of authors should match the same order presented below the title on the title page.

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2. Send the manuscript via the R-Sytem research database website http://research.dusit.ac.th/r-system.