Training on Improving Learning Skills in the Era of Disruption for Primary School Principals and Teachers

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Abstract: The purpose of this program is to provide understanding and skills of learning concepts in the era of disruption, the use of learning technology in the era of disruption, and the preparation of learning plans based on blended learning. The methods used in the training include lectures, discussions, questions and answers, modeling, demonstrations, problem-based learning, and assignments. These methods are integrated into the training strategy. The results of activities directly learning skills of school principals and teachers in the disruption era increased significantly after attending the training. Meanwhile, the results of the activities can be concluded indirectly: (1) in general, the implementation of the training has a positive impact in increasing the motivation of participants during the activity or after the training activity takes place; (2) participants were satisfied with the presenters during the training; and (3) participants still have the desire to follow up on the results of the training, especially in the enthusiasm to hold advanced training and online follow-up discussions related to improving learning skills in the era of disruption.

Keywords: training, learning skills, disruption era

1. INTRODUCTION

Teachers are the spearhead in efforts to achieve educational success in realizing high quality educational output. The challenge faced is how teachers can develop or improve learning models that take advantage of technological sophistication as a learning medium, because students will certainly be interested in attractive learning models rather than monotonous learning models [1], [2]. The teacher is not only a source of learning, but the challenge is how teachers can become learning facilitators for students in schools. Ease of access to information of course must also be balanced with teacher assistance to students to be able to filter all information accessed by students so that there are no misconceptions.

The current technological development is so massive as a sign of the development of changes in society in the era of the industrial revolution 4.0 or the era of technological disruption [3]. As a result, there has been a change in the lifestyle of the people who depend on technological sophistication. These changes have occurred in all areas of life, including in the field of education. The development of technological sophistication makes it easy to access all sources of information knowledge as a source of learning because it is not bound by distance, space and time. All sources of knowledge can be accessed anywhere and anytime, this is of course a new problem as well as a challenge for principals and teachers who are directly involved in learning activities at school [4]–[6].

Therefore, efforts are needed to improve teacher skills in teaching in the midst of the challenges of the current era of technological disruption. Not only teachers, of course, also the principal as his role in learning leadership activities, of course, must have skills in fostering teachers to improve their abilities in learning activities at school [7]–[9]. Principals need to understand and find the right formula for learning models in schools that are in line with the challenges in the era of technological disruption [10]–[12]. Meanwhile, for teachers, it is necessary to try to make a renewal of the learning model in the classroom through the use of technology.

Ease of access to information on learning resources that is accessed through technological sophistication can reduce the role of teachers, which can be replaced at any time by technology. But the role of teachers that cannot be replaced by technology is the internalization of moral values that are transferred to students. Access to technology only provides easy access to knowledge, while the transfer of moral and social values can only be done by teachers, so of course this is a challenge for teachers to improve their learning skills in the midst of technological disruption. The learning skills being trained are characterized by: (1) building the superior potential of principals and teachers through a change in the learning paradigm from teacher centered learning, to student centered learning, and based on the use of information technology; (2) improving teaching skills of teachers,
through understanding the types of learners, understanding how students learn, and how to manage class dynamics with persuasive communication skills assisted by information technology; and (3) application of the Student Centered Learning (CTL) method, through understanding and designing learning using the blended learning model which is then followed by the preparation of a learning plan.

Global problems that occur today are related to learning activities in schools, including in Kediri, Indonesia. As a strategic city in a geographic location with industry and services as the city’s superior power. This city has the potential to continue to develop, one aspect of its carrying capacity is education. Therefore, it is necessary to make efforts to upgrade the abilities of principals and teachers, especially elementary school teachers, through a program to improve learning skills in the era of disruption. Based on the description above, the goal of community service through a program to improve learning skills in an era of disruption of the head and elementary school teachers. The aim of this program is to provide understanding and skills of learning concepts in an era of disruption, the use of learning technology in an era of disruption, the use of learning technology in the era of disruption, and the preparation of learning plans based on blended learning.

2. METHOD

The form of service carried out is training to improve learning skills in an era of disruption of the head and elementary school teachers. The target of this program is school principals and elementary school teachers in Kediri City, Indonesia. In an effort to optimize the success of training activities to improve learning skills in this era of disruption of the head and elementary school teachers, the methods used include: lectures, discussions, question and answer, modeling, demonstrations, problem-based learning, and assignments. These methods are integrated into the training strategy.

There are three stages of training carried out so that activities can achieve the desired goals. The first stage, at this stage several activities were carried out, namely, program introduction, and preparation of training guidelines and agendas, program introduction involving the Kediri City Education Office as a service partner and liaising with school principals and teachers. The activity begins with an explanation of the concept of learning in an era of technological disruption related to challenges and opportunities. Then proceed with the preparation of guidelines and training agendas on concepts, planning, strategies, and implementation of these learning concepts.

The second stage was training, at this stage it was carried out face-to-face attended by 20 school principals and 20 teachers, which was carried out face-to-face by applying the covid-19 health protocol. At this stage, a reflection of the learning that has been carried out by the school is carried out, the explanation of learning concepts in the disruption era, the use of learning technology in the disruption era, and the preparation of a blended learning-based learning plan, which is followed by the practice of using information technology in learning.

The third stage is evaluation, at this stage what is carried out is an evaluation of the process and results of the activities. Process evaluation is carried out to see the success of the overall activity process. Meanwhile, the evaluation of the results is carried out to see the success of school principals and teachers in understanding the concepts and practices of improving learning skills in the era of disruption. The evaluation of the results is obtained from the pre-test and post-test question sheets filled out by the training participants.

3. RESULTS

Through a variety of methods, strategies and techniques presented, exemplified and practiced by participants during the training activities, the substantive results of activities can be described and can be divided into two forms of activity results, namely the results of direct activities and the results of indirect activities. The results of direct activities, based on the results of the analysis, have increased understanding and skills of learning concepts in the era of disruption, the use of learning technology in the era of disruption, and the preparation of learning plans based on blended learning for the head and the teacher. Based on Table 1, it is known that the number of participants is 40, consisting of 20 principals and 20 teachers who achieved an average pre-test score of 57.65 in the good category, with a significant increase based on the post-test results of 85.25 in the very good category.

| Score | Interval | Category | Frequency | Mean | Information |
|-------|----------|----------|-----------|------|-------------|
| Pre-Test |          |          |           |      |             |
| 0     | - 25     | Not good | 0         | 57.65| Well        |
| 26    | - 50     | Not good | 12        |      |             |
| 51    | - 75     | Well     | 24        |      |             |
| 76    | - 100    | Very good| 4         |      |             |
| Post-Test |        |          |           | 85.25| Very good   |
| 0     | - 25     | Not good | 0         |      |             |
| 26    | - 50     | Not good | 0         |      |             |
| 51    | - 75     | Well     | 10        |      |             |
| 76    | - 100    | Very good| 30        |      |             |

Table 1 Frequency Distribution and Mean Value of Pre-Test and Post-Test Learning Skills in the Era of Disruption

N: 40
The description of the results is supported by the results of the value difference test before and after the training, before the difference test was carried out using the paired sample t-test, first the data was tested for normality using the Kolmogorov Smirnov test. Based on Table 2, it is known Asymp. Sig. (> 0.05), that is pre-test and post-test data were found to be normal. Different tests were performed using paired sample t-test with the help of SPSS 24.0. Based on Table 3, it is known that the sign value is 0.00 (< 0.05); This shows that there is a significant difference in disruption era learning for principals and teachers before and after participating in training.

| Table 2 Normality Test of Pre-Test and Post-Test Data for Learning Skills in the Disruption Era |
|-----------------------------------------------|
| **N** | **Pre** | **Post** |
| **Normal Parameters** | Mean | 57.6500 | 85.2500 |
| | Std. Deviation | 10.36896 | 9.01779 |
| **Most Extreme Differences** | Absolute | 0.108 | 0.140 |
| | Positive | 0.108 | 0.112 |
| | Negative | -0.091 | -0.140 |
| **Statistical Test** | Asymp. Sig. (2-tailed) | 0.138 | 0.140 |
| | Asymp. Sig. (2-tailed) | 0.128 | 0.072 |

| Table 3 Paired Sample T-Test Results of Learning Skills in the Disruption Era |
|-----------------------------------------------|
| **Pair Differences** | **Mean** | **Std. Deviation** | **Std. Error** | **95% Confidence Interval of the Difference** | **t** | **df** | **Sig. (2-tailed)** |
| Pair 1 | Pre, Pem - Post, Pem | -27,600 | 11,345 | 1,794 | -31,228 - 25,972 | -15,386 | 39 | 0.000 |

The results of the activities are: (1) in general the implementation of training the improvement of learning skills in the era of head and teacher disruption has a positive impact on increasing participant motivation during or after training activities; (2) participants feel satisfied with the presenters’ presentation during the training based on participant and class mastery, mastery of material, selection of methods and strategies during the training activities, and clarity (articulation and information) conveyed, as well as closeness to participants; and (3) participants still have the desire to follow up on the results of the training, especially in the enthusiasm to hold advanced training and online follow-up discussions through WhatsApp media related to improving learning skills in the era of head and teacher disruption.

4. DISCUSSION

One of the techniques for developing teacher professionalism is training. There are several principles in developing teacher professionalism: (1) being creative and constructive; (2) based on collective sources; (3) cooperative and democratic; (4) is based on professional relationships; (5) develop potential participants; (6) carried out systematically, scientifically and objectively; and (7) based on the objectives that have been previously stated [13]. Training can be successful if it is supported by the right strategies and techniques carried out by the resource persons. The closeness built by the resource person can determine the quality of participant involvement in the activity. The high level of interaction and involvement of the participants will increase the quality of the training success [14], [15]. The main means of increasing teacher professionalism is through teacher training. Teacher coaching is the process of providing assistance to teachers, whether in the form of guidance, direction, or other forms, with the aim of improving teacher skills in carrying out their duties, especially their teaching assignments.

However, school principals and teachers need skills in terms of learning in an era of disruption which is closely related to technology, but still does not leave local wisdom [16]. The perspective of learning skills for principals and teachers is very broad, but all lead to real performance that teachers must show in carrying out teaching assignments [17].

Mature readiness is needed, namely the teacher must prepare learning tools properly starting from the lesson plans, the learning media that will be used, and the learning model that will be implemented in the classroom. Including technology tools that will be used in learning activities in the form of laptops or smartphones, as well as supporting programs/applications, such as Google Classroom, Moodle, GMeet, Zoom [18], [19].

Blended learning is a combination of offline (offline) and online (online) learning [20]. Semler inside stated that blended learning is an effort to combine the best domains of online learning, structured face-to-face activities, and practice in the real world [21]. The habit of using blended learning is necessary, because it reduces and or prevents students from using computers and cell phones...
for negative things [22]. For example, the behavior of playing social media, games, and watching excessive videos. Blended learning, which has the characteristic of having supervision by teachers and parents, is something that can be achieved.

Referring to ICT-based learning, using a blended learning model, at least has three main steps; namely: (1) Seeking of information; (2) Acquisition of information; and (3) Synthesizing of information [23]. Carman suggests five keys in the learning process using the blended learning model, namely (1) direct learning synchronously in the same time and place as well as the same time but in different places; (2) combine with independent learning which can enable students to study anywhere, anytime online; (3) collaboration, both teacher and student collaboration or collaboration between students; (4) teachers must be able to formulate a combination of online and offline assessment types, both test and non-test; and (5) ensure that study materials are prepared in digital form, accessible to students both online and offline [24].

5. CONCLUSION

Based on the results and discussion of the implementation of training activities increasing learning skills in the era of head and teacher disruption, it can be concluded based on the results of direct activities and the results of indirect activities. The results of activities directly learning skills of school principals and teachers in the disruption era increased significantly after attending the training.

Meanwhile, the results of the activities can be concluded indirectly: (1) in general, the implementation of the training has a positive impact in increasing the motivation of participants during the activity or after the training activity takes place; (2) participants were satisfied with the presenters during the training; and (3) participants still wish to follow up on the results of the training, especially in the enthusiasm for conducting advanced training and online follow-up discussions related to improving learning skills in an era of head and teacher disruption.

REFERENCES

[1] H. Mirzajani, R. Mahmud, A. F. M. Ayub, and S. L. Wong, “Teachers’ acceptance of ICT and its integration in the classroom,” Quality Assurance in Education, vol. 24, no. 1, pp. 26–40, 2016, doi: 10.1108/QAE-06-2014-0025.
[2] N. J. Albrecht, P. M. Albrecht, and M. Cohen, “Mindfully teaching in the classroom: A literature review,” Australian Journal of Teacher Education, vol. 37, no. 12, pp. 1–14, 2012, doi: 10.14221/ajt.e.2012v37n12.2.
[3] D. Iranioto, “Industry 4.0: The Challenges of Tomorrow,” 2017.
[4] T. Wallner and G. Wagner, “Academic Education 4.0,” International Conference on Education and New Developments, vol. June, pp. 155–159, 2016.
[5] V. Roblek, M. Melško, and A. Krapež, “A Complex View of Industry 4.0,” SAGE Open, vol. 6, no. 2, pp. 1–11, 2016, doi: 10.1177/215824016653987.
[6] A. D. Dubey, “ICT in Education,” International Journal of Information and Communication Technology Education, vol. 12, no. 4, pp. 37–50, 2016, doi: 10.4018/jict.e.2016100104.
[7] C. M. Neumerski, “Rethinking Instructional Leadership, a Review: What Do We Know About Principal, Teacher, and Coach Instructional Leadership, and Where Should We Go From Here?,” Educational Administration Quarterly, vol. 49, no. 2, pp. 310–347, 2013, doi: 10.1177/0013161X12456700.
[8] H. Pan, F. Nyeu, and J. S. Chen, “Principal instructional leadership in Taiwan: lessons from two decades of research,” Journal of Educational Administration, vol. 53, no. 4, pp. 492–511, 2015, doi: https://doi.org/10.1108/JEAD-01-2014-0006.
[9] M. Afshari, K. A. Bakar, W. S. Luan, B. A. Samah, and F. S. Fooi, “Technology and School Leadership,” Technology, Pedagogy and Education, vol. 18, no. 2, pp. 235–248, 2009, doi: 10.1080/14759390902992527.
[10] J. G. Rigby, “Three Logics of Instructional Leadership,” Educational Administration Quarterly, vol. 50, no. 4, pp. 610–644, 2014, doi: 10.1177/0013161X13509379.
[11] Juharyanto, I. Arifin, I. Bafadal, A. Y. Sobri, and A. Nurabadi, “Effective Leadership on Curriculum 2013 Implementation in Religious Based Schools,” The Journal of Social Sciences Research, vol. sp, no. 2, pp. 40–48, 2018, doi: DOI: 10.32861/jssr.
[12] I. Bafadal, “Penilaian Kinerja Kepala Sekolah Sebagai Pemimpin Pembelajaran Dalam Rangka Peningkatan Akuntabilitas Sekolah,” Manajemen Pendidikan, vol. 25, no. 1, pp. 1–9, 2016.
[13] B. B. Wiyono, Pembinaan Profesional Guru: Konsep, Hasil Penelitian, dan Pengembangan. Malang: UM Press, 2017.
[14] I. Arifin, J. Juharyanto, S. Sulton, B. R. Saputra, and M. A. Adha, “Pendampingan Penulisan Artikel Ilmiah Layak Jurnal Nasional Ber-ISBN Berbasis Sitasi Online Bagi Tenaga Pendidik Se-Kabupaten Bondowoso,” Jurnal KARINOV, vol. 3, no. 1, p. 16, 2020, doi: 10.17977/um045v3i1p16-21.
[15] J. Voogt, T. Laferrière, A. Breuleux, R. C. Ito, D. T. Hickey, and S. McKenzie, “Collaborative Design as a Form of Professional Development,” Instructional Science, vol. 43, no. 2, pp. 259–282, 2015, doi: 10.1007/s11251-014-9340-7.
[16] P. Wollman, F. Khun, and M. Kempf, Three Pillars of Organization and Leadership in Disruptive Times. Basel: Springer International Publishing, 2020.
[17] J. H. van Driel and A. Berry, “Teacher Professional Development Focusing on Pedagogical Content Knowledge,” Educational Researcher, vol. 41, no. 1, pp. 26–28, 2012, doi: 10.3102/0013189X11431010.
[18] A. Rosyid, “Technological Pedagogical Content Knowledge: Sebuah Kerangka Pengetahuan Bagi Guru Indonesia di Era MEA,” Seminar Nasional Inovasi Pendidikan, 2016.
[19] A. Azhar, “Kepemimpinan Kepala Madrasah dalam Meningkatkan Mutu Pendidikan di Madrasah Tsanawiyah Satu Atap Makrussisbyan NW Selangket Desa Penujak Kecamatan Praya Barat Kabupaten Lombok Tengah,” MANAZHIM, 2019, doi: 10.36088/manazhim.v11i1.172.
[20] C. G. Graham and S. Allen, “Designing Blended Learning Environments,” in Encyclopedia of Distance Learning, Second Edition, British Columbia: Idea Group Inc, 2011.

[21] Husamah, Pembelajaran Bauran (Blended Learning). Jakarta: Hasil Pustaka, 2013.

[22] J. Bailey et al., “Blended Learning Implementation Guide 3.0,” DLN Smart Series, pp. 1–65, 2015.

[23] G. Ramsay, “Teaching and Learning with Information and Communication Technology: Succes Through a Whole School Approach,” 2001.

[24] J. M. Carman, Blended Learning Design: Five Key Ingredients. Utah: Agilant Learning, 2005.

[25] Sultoni, I. Gunawan, & T. N. Rosalinda. (2018). Pengaruh Pembentukan Tim Dan Kepemimpinan Spiritual Terhadap Motivasi Diri Mahasiswa. JMSP (Jurnal Manajemen dan Supervisi Pendidikan), 2(3), 210-216.

[26] Gunawan, I., Bafadal, I., Nurabadi, A., & Prayoga, A. G. (2020, November). Identification of Themes in the Moral Debate Program as an Effort to Increase Work Integrity of Principal. In 2nd Early Childhood and Primary Childhood Education (ECPE 2020) (pp. 24-28). Atlantis Press.

[27] Imron, A., Wiyono, B. B., Hadi, S., Gunawan, I., Abbas, A., Saputra, B. R., & Perdana, D. B. (2020, November). Teacher Professional Development to Increase Teacher Commitment in the Era of the Asean Economic Community. In 2nd Early Childhood and Primary Childhood Education (ECPE 2020) (pp. 339-343). Atlantis Press.