Conference Paper

Enhancing the Effectiveness of Teacher Work and Teams

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Abstract
Cognitive abilities, personality, motivation, knowledge, behavior, emotions, development factors are essential for teachers. The purpose of this study is to provide capacity-building strategies to encourage teacher innovation through personal activities and the external work environment. This study was directed in a descriptive way based on the 2018 UKG scores, which were obtained from the NPD Ministry of Education and Culture (Kemdikbud) website. Our analysis shows that innovative teacher work behavior can be a reference and valuable contribution to improving teacher competency both in terms of pedagogical and professional abilities. Teachers must work in a climate fostering creativity and innovation to ensure a globally competitive educational output.

Keywords: innovative behavior, teacher innovation, teachers’ skill

1. Introduction
In maintaining the stability of an organization, in this case an educational organization, the ability that must be maintained and developed is to maintain competitive advantage. Educational organizations, will remain to survive as long as it is able to compete among the many competitors who are more competitive. As a consequence, to survive in competition, one of the vital components of education, explicitly teachers, must strive to build trust and interest of prospective students, improve the quality of graduates, and develop their performance that can realize competitive advantage.

Teacher is a significant aspect that plays an active role in the development of school performance [1]. This must be done because aspects considered as the main contribution to the success and sustainability of the organization in the midst of unpredictable market conditions, increasing technological developments, and increasingly extreme global competition are the ability to be creative and innovate.
Previous research on innovative work behavior, focused on school nurses that identified and analyzed the patterns of relationships that occur in middle school faculty with school condition characteristics and behavioral health indicators on innovative behavior related to student mental health [2]. It was listed that an increase in the number of years worked in the K–12 environment was associated with less innovative behavior related to student mental health. School nurses who explore innovative behavior by faculty and staff may find opportunities to collaborate and improve student health outcomes. That is, school nurses take an important role with a great responsibility to be willing to innovate for the advancement of education.

This paper tries to examine and / or analyze the innovative behavior of vocational teachers which can be seen as a bridge for improving performance considering that Teacher Competency Test (UKG) results have not shown significant results. In relation to the competitive climate, there are still a number of problems for teachers themselves. Refereeing from the UKG scores in 2018, the average teacher scores are still low [3]. As a result, to improve competitiveness, every teacher must possess and develop dissimilarity and innovation in the era of rapid change today. In an effort to win the competition, the role of strategy is a must, because strategies can create alternatives that can be taken so that teacher can survive in this competitive era.

Another fact is also mentioned by the Political and Economic Risk Consultant (PERC) survey, that the quality of education in Indonesia ranks 12th out of 12 countries in Asia. Indonesia's position is below Vietnam. Data reported by The Sweden World Economic Forum, Indonesia has a low competitiveness, which is only ranked of 37 out of 57 countries surveyed in the world. And still according to a survey from the same institution, Indonesia is only predicated as a follower country not as a technology leader from 53 countries in the world [4].

The increase in innovation in organizations is caused by at least 80% of new ideas which are all initiated by employees [5]. While the rest is the result of innovation activities prearranged by the organization both strategy and structure. This is the basis that employees are an important asset in producing innovation. Innovation at the individual level, better known as innovative work behavior, is one of the best ways to increase innovation and organizational success [6].

De Jong explained that innovative behavior at work locations is individual behavior that aims to reach the initiation stage or try to introduce (in work, groups or organizations) ideas, concepts, processes, products and procedures as well as new and useful procedures [7]. He also stated that innovative work behavior includes four processes, including the process of exploring opportunities, the process of generating ideas, the process of
keep standing for ideas and the process of application. Most teachers impart with the same material and methods for generations. Hence, it will bring up the inaccuracy of the results of the students themselves. Schools must be like organizations that must continuously develop innovative products and services.

Teacher Competency Test (UKG) is an assessment activity intended to measure basic competencies about subject matter and pedagogy with teacher as the domain content. Basic competencies in the field of study tested in accordance with the field of certification study (for teachers who are already certified educators) and in harmony with teacher academic qualifications. The pedagogic competency tested is the integration of pedagogic concepts into the learning process of the field of study in the classroom. By understanding the basic understanding of UKG, which is the basis and guideline, which sustains the teacher's competence in carrying out the task.

UKG implemented in order in the framework of mapping teacher competency mastery (pedagogic and professional competencies) which will be used as a basis for consideration of the implementation of the teacher professional development and advance program and as an entry point and control tool for evaluating teacher performance. UKG is carried out in stages and must be followed by all teachers in positions, both PNS (public servant) and not an as public servant teachers, on the condition that he/she has a NUPTK, is registered in the Dapodik, and is still actively in teaching and learning process [8].

Arbitrating from its purpose, UKG is intended to: (1) as a map for teacher mastery competencies (pedagogical and professional competencies) as a basis for deliberation of program implementation; fostering and developing the teaching profession in the form of activities; and sustainable professional development. (2) As an entry point for teacher performance appraisal and as a control tool for implementing teacher performance evaluation. Continuing professional development programs and teacher performance assessments must be carried out annually as a requirement for promotion and functional positions of teachers.

The existing conditions and situations cause each teacher to have a difference in the mastery of the required competencies. Therefore, there are two targets set by the Ministry of Education and Culture (Kemdikbud) to measure teacher professionalism, academically and non-academically. Academic measurements are carried out routinely every year by conducting UKG, and non-academic measurements by evaluating teacher performance.

Toward the inside era of the industrial revolution 4.0, teachers must have a number of skills besides the main abilities namely competence skills, but also the commitment
development work, capacity building, leadership of the principal, and innovative work behavior. Innovative work behavior is seen as an effective effort in dealing with problems in organizational competition. Moreover, the elements that make the organization frail are important components of educators whose amount values are still in the low category.

Developing human resources in an organization is essential. Investment in human resource development is an expenditure aimed at improving the productive capacity of humans. Aspects of human resource development cover a number of things that are quite extensive in the organization. Werner and DeSimone defines human resource development as a series of systematic and planned activities designed by organizations to provide opportunities for members to learn the skills needed to meet current and future work requirements [9].

Innovative behavior is involved in one of the development of human resources that encompasses creative activities instigated at the individual level within organizations that result in a change in the work environment [10]. Employees who engage in IWB apply new ideas to their work environments. Innovative work behavior is very central for organizational innovation and, eventually, organizational persistence and effectiveness [11].

2. Methods

This research is a content analysis research conducted descriptively based on the results of the UKG value in 2018 from one of the regions in Indonesia, specifically Kab. Subang This area was chosen because it is in the sixth position in the West Java province for the SMK category. This is far from the ranking of the city of Bandung as first place in the province of West Java. Kab. Subang has 108 public and private SMK spread across 30 sub-districts.

This data was chosen intentionally by reading UKG results data from the Ministry of Education and Culture’s Regional Education Balance Sheet website, as well as data from the Ministry of Education and Culture’s Dapodikdasmen website. The selected data is data relating to pedagogical and professional levels. For the purpose of this article, the data are made in the form of a short table to see the differences from several regions in the West Java province.
3. Results and Discussion

West Java is one of the provinces in Indonesia with the most population. Neither the number of students is also the same teacher. In this article, only the Kab. Subang as the object of writing. Below is the data of the West Java Province Teacher Competency Test (UKG) results in 2018.

**Table 1:** Data on UKG Results for West Java Province in 2018.

| No | Region                  | Vocational High School | Pedagogic | Professional | Average |
|----|-------------------------|------------------------|-----------|--------------|---------|
| 1  | Prov. Jawa Barat        | 59.29                  | 54.36     | 60.95        | 58.97   |
| 2  | Kab. Bogor              | 58.36                  | 54.35     | 61.1         | 59.08   |
| 3  | Kab. Sukabumi           | 56.79                  | 53.45     | 59.72        | 57.84   |
| 4  | Kab. Cianjur            | 57.13                  | 51.86     | 57           | 55.46   |
| 5  | Kab. Bandung            | 61.49                  | 54.67     | 61.89        | 59.72   |
| 6  | Kab. Sumedang           | 59.48                  | 55.04     | 60.7         | 59      |
| 7  | Kab. Garut              | 58.26                  | 52.78     | 59.35        | 57.38   |
| 8  | Kab. Tasikmalaya        | 58.97                  | 54.07     | 60.55        | 58.61   |
| 9  | Kab. Ciamis             | 59.6                   | 53.92     | 60.72        | 58.68   |
| 10 | Kab. Kuningan           | 59.26                  | 54.15     | 60.46        | 58.57   |
| 11 | Kab. Majalengka         | 59.83                  | 54.4      | 60.85        | 58.91   |
| 12 | Kab. Cirebon            | 57.35                  | 53.24     | 59.82        | 57.84   |
| 13 | Kab. Indramayu          | 56.18                  | 52.1      | 57.4         | 55.81   |
| 14 | Kab. Subang             | 57.17                  | 52.79     | 59.03        | 57.16   |
| 15 | Kab. Purwakarta         | 58.5                   | 53.88     | 59.3         | 57.68   |
| 16 | Kab. Karawang           | 57.01                  | 52.19     | 58.37        | 56.52   |
| 17 | Kab. Bekasi             | 57.03                  | 52.79     | 60.03        | 57.86   |
| 18 | Kab. Bandung Barat      | 58.7                   | 54.96     | 60.58        | 58.89   |
| 19 | Kab. Pangandaran        | 58.62                  | 51.58     | 57.89        | 56      |
| 20 | Kota Bandung            | 64.13                  | 58.79     | 65.97        | 63.82   |
| 21 | Kota Bogor              | 62.27                  | 58.03     | 65.54        | 63.29   |
| 22 | Kota Sukabumi           | 62.77                  | 57.94     | 64.89        | 62.81   |
| 23 | Kota Cirebon            | 61.14                  | 57.52     | 64.54        | 62.44   |
| 24 | Kota Bekasi             | 59.48                  | 55.63     | 63.5         | 61.14   |
| 25 | Kota Depok              | 59.09                  | 56.02     | 63.99        | 61.6    |
| 26 | Kota Cimahi             | 61.52                  | 58.25     | 64.91        | 62.91   |
| 27 | Kota Tasikmalaya        | 61.09                  | 56.44     | 63.25        | 61.21   |
| 28 | Kota Banjar             | 59.74                  | 56.94     | 61.91        | 60.42   |

Based on the table above, UKG 2018 results of West Java province were taken from the Regional Education Balance Sheet with 28 regions. Kab. Subang ranks sixth lowest of 28 other regions. The UKG Vocational School score is at nominal 57.17 with pedagogical aspects 52.79 and 59.03 professional aspects.
The average results of vocational teacher qualifications in Kab. Subang are 57.16, this is still in the low category. The value of teacher competency test (UKG) and teacher qualifications are achieved well if there is a commitment of teacher professionalism always to be enthusiastic, motivated, and disciplined, willing to take part in supporting and to continue the study so that they are qualified to teach superior students.

The teacher’s commitment is predisposed by the leadership of the principal, as a leader, who provides motivation and space for the teacher to develop his potential, as well as building a great organizational culture and climate so that the teacher’s commitment to work as well as possible.

Kab. Subang has 108 SMK from 30 existing districts. This number is far greater than the number of public and private high schools (SMA) with a total of 79. This is in view of the Indonesian government’s policies related to vocational schools which become “new hope” in alleviating the difficulties of employment. Many private foundations are competing to establish vocational schools, both in Kab. Subang and in other areas. However, the rapidly increasing of vocational schools is not directly proportional to the state of the teaching staff.

In fact, the state of teacher competence is still far from the average or standard both at the elementary, junior high, high school, vocational level, as well as informal and non-formal education. Many teachers do not have a bachelor standard, many others are not linear according to their competence. Some of these problems also make output or school graduates, especially vocational schools, have expertise as well as competencies that are not up to standard. Even in other data, SMK graduates rank first as the biggest contributor (8.92%) in unemployment [12]. This unemployment rate is calculated by the low quality of graduates so that they cannot compete in the global market world.

Therefore, the teacher as an important component in education must have a commitment to work. That commitment is manifested in the form of ongoing commitments, also strong commitments, and there is control over those commitments. Commitment to work can be developed into interesting and dependent activities. The key is that all stakeholders join in making the entire program planned successful.

Moreover, the main key also exists in a work environment that supports members of the organization to be able to develop themselves. As a factor that can make individuals can bring up individual behavior is inseparable from two factors that is internal or personal factors and external factors or from the work environment itself [13]. The aspects covered by internal factors are cognitive ability, personality, motivation, knowledge, behavior, emotions and mood, developmental factors. While aspects that are included in the work environment are organizational ambidexterity.
Organizational ambidexterity is the exploration and exploitation carried out by the company, resources originating from the social sphere (characteristics of coworkers, leader characteristics, feedback, social networks), job design (job characteristics, job demands, physical environment), and resources derived from the scope of the organization (organizational structure and size, organizational climate and culture, resource allocation, incentives and rewards, and psychological contracts).

In school, as well as at other workplaces, innovative behavior is important in order to keep up to date with a rapidly changing society. The strains in our knowledge society are truly increasing both for students and their teachers [14]. In other hands, technologies are developing so violently and new comprehensions about teaching necessitate innovative behavior. Therefore, schools should set a good example and act as a starting point for more innovative behavior of our citizens so that society can stay competitive [15].

4. Conclusion

Nevertheless, teachers take on the enormous duty of serving as the holistic strength experts in our educational system. Fostering effective collaboration among other vocational teachers who are not only concerned with the issue of promotion or salary. Vocational school teachers should pay attention to their internal competence by making excellent innovations that can be done individually or as a team. With innovation, there will undoubtedly lead to a positive climate, be it teachers, stakeholders, or students.

The references from this paper indicate that a variety of vocational teachers must find innovative ways to meet the competency needs of the teacher himself. Another input is that more senior and experienced teachers must perceive themselves to innovate more and protect other teachers who have less experience. Further research can advance clarify the nature and context of innovation that can help vocational teacher competencies in general both from the teacher’s personal side as well as the external work environment.

Acknowledgement

The authors would like to express gratitude to their teammate and colleague for their contribution and support to this paper. The authors are also thankful to all the reviewers who gave their valuable feedbacks to this paper and helped in completing the paper.
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