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PROCEDDING

International Conference
on Teacher Education And Professional
Development (INCoTEPD) 2016

EASTPARC HOTEL YOGYAKARTA

17 – 19 MAY 2016

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FOREWORD BY RECTOR OF YOGYAKARTA STATE UNIVERSITY

Assalamu'alaikum warrahmatullah wabarakatuh.
May peace and God's blessings be upon you all.

First of all, let me express my gratitude for the successful of organizing profound speakers and participants to attend the International Conference on Teacher Education and Professional Development held by the Institute of Educational Development and Quality Assurance, Yogyakarta State University, for the first time. On behalf of the university and the committee, let me extend my honor and great appreciation to the keynote speaker, the invited speakers, parallel session speakers and all participants who have travelled hundreds or even thousands of miles to come to Yogyakarta to attend this conference. It is my strong belief that a safe journey has been due to the blessings granted by God the Almighty and the Most Merciful to Whom we without any further due have to express our gratitude and praise.

It is indeed a privilege for Yogyakarta State University to have the opportunity to organise this very important conference in which educational researchers and practitioners on teacher training programs get together to share excellent ideas, recent experiences, expectations, and empirical research findings. The main theme of the conference is "In search of effective teacher education and professional development: Learning from research and best practices around the globe". This conference is also one of the activities in the agenda of Yogyakarta State University to celebrate its 52nd anniversary.

The current advancement of the education in Indonesia has been pursued in the further development of the teacher education as it is provided by teacher education institutions across the country. The development takes concerns on two prominent areas, (i) teacher education programs namely pre-service training; and (ii) teacher professional development designed for current teachers in service. The conference addresses these two areas in related to philosophical basis, purposes, programs and policies on teacher education and professional development. The first area may include content materials (capacities, knowledge, beliefs and skills) should be acquired and developed by teachers; recruitment and selection (and retention) for teachers; qualifications for teacher educators and the institutions providing the programs and licenses to teach. While the second takes into account various in-service programs to maintain and advance the qualities of current teachers through periodical assessment and evaluation, trainings/courses and involvement in professional forums to share knowledge, experiences and skills between teachers.

Efforts to improve the quality of teacher education and professional development for all subjects must be continuously supported to produce new innovations, high-quality instructions and sustainable program. Therefore, this conference is specifically aimed for:

1. Identifying principles of effective teacher education (pre-service training) based on current research findings and best practices in different parts of the world.
2. Identifying principles of effective continuous teacher professional development based on current research findings and best practices in different parts of the world.

3. Developing effective models of teacher education based on current principles of effective teacher education.
4. Developing models of in-service training based on current principles of effective continuous teacher professional development.

It is expected that this conference provides teachers/lecturers, education practitioners, college students, and policy makers the opportunity to share their knowledge, experiences, and research findings relevant to develop the educational practices focusing on the process and product. Eventually, this conference is aimed to facilitate academics, researchers and teachers to yield some recommendations on the importance of education and development of teacher education programs based on empirical evidence which brings the benefits of the prosperity of all.

This international conference will not be what it is without the cooperation and support rendered by the whole committee whose names I will impossibly mention one by one. Therefore, I would like to take the opportunity to extend my highest appreciation and sincerest gratitude to especially the organizing committee for their commitment and hard work. Only with their support will this international conference certainly reach its declared objectives successfully. Yogyakarta State University has done its best to make this conference a big success, however, should you find any shortcomings and inconveniences, please accept my apologies.

Finally, we hope this conference brings practical recommendations for the university and also for relevant educational institutes. We also wish all participants great success and this international conference will bring us fruitful benefits in education. Thank you very much.

Wassalamu'alaikum warahmatullah wabarakatuh.
May peace and God's blessings be upon you all.

Yogyakarta, 17 May 2016
Rector,

Prof. Dr. Rochmat Wahab, M.Pd., M.A.

FOREWORD BY THE HEAD COMMITTEE

Assalamu'alaikumwaRahmatullahiwaBarakatuh

May God bless upon us

This conference entitled International Conference on Teacher Education and Professional Development is organized by the Institute of Educational Development and Quality Assurance, Yogyakarta State University. This is the first time that our university is proudly holding an international conference specific on pre-service and in-service teacher development. The main theme of the conference is "in search of effective teacher education and professional development: Learning from research and best practices around the globe". This conference is also dedicated to the 52nd anniversary of Yogyakarta State University.

This conference facilitates academics, researchers and teachers from the field of teacher education, policy in education, standards and management, educational science and continuous professional development. Innovative issues, thought, empirical findings in these fields are emerging from time to time. Hence, it is necessary for us to come together and discuss these exciting recent developments of teacher education and professional development through this conference. Furthermore, it is expected that this conference would produce some recommendations on how to improve pre-service and in-service training programs.

On behalf of the organizing committee of this conference, I would like to express my highest appreciation and gratitude to the keynote speaker from the Ministry of Research and Higher Education of the Republic of Indonesia who will deliver the recent teacher education policy in Indonesia; and for the invited speakers from Australia, Finland, the USA, Hong Kong and Indonesia. They and the title of the talk are:

1. Prof. Lesley Harbon, Ph.D; The University of Technology Sydney; Teacher professional development in Australia and Asia: A comparative study.
2. Prof. Dr. Ng Shun Wing; The Hong Kong Institute of Education; Model of teacher education in Hong Kong.
3. Heidi Layne, Ph.D; Teacher education and teacher's professional development in Finland: Myths and realities.
4. JeniseRowekamp, M.A.; Successes and challenges in the development of excellent teachers in the United States.
5. Prof. Dr. SunaryoKartadinata; Education University of Indonesia; Model of teacher education and in-service professional development in Indonesia.
6. Prof. SuwarsihMadya, Ph.D.; Yogyakarta State University, Indonesia; Teacher initiative and continuous professional development in Indonesia.

Furthermore, I would also like to express my appreciation to about ## regular presenters, ## invited participants and 20 regular participants, who have travelled from many places to Yogyakarta in order to attend this conference. The regular presenters are allocated 30 minutes to present and discuss their paper, in the parallel session. From the selection and review stages, half of the regular presentation takes theme on the in-service teacher training program and the other half is on the pre-service teacher training program. Great appreciation goes to the presenters and reviewer teams in preparing the papers.

We do hope this conference will achieve its goals in emerging innovative, effective and efficient teacher programs towards a better education results. We also hope that this conference will bring fruitful results and promote networking as well as future collaborations for all participants to promote successful education in the near future.

Finally, highest appreciation goes to the organizing committee who have been working very hard since about a year ago to ensure the success of the conference. We hope all participants take the most of the conference, have a very good moment during the conference and enjoy the city of Yogyakarta, Indonesia. Thank you very much.

Wassalamu'alaikumwaRahmatullahiwaBarakatuh.

May God bless upon us

Yogyakarta, 17 May 2016
Chairman of InCoTEPD 2016

Drs. Suyud, M.Pd

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IMPROVING THE QUALITY OF OFFICE ADMINISTRATION VOCATIONAL TEACHERS THROUGH COMPETENCY-BASED TRAINING IN INDONESIA

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Abstract

One of the factors that influence the quality of education is teacher quality. Teacher quality can be viewed from a mastery framework of a teacher's pedagogical, professional, social, and personality competence. Beginning teacher competence test results in 2012 showed the level of competence of teachers in Indonesia is still low with the highest value of 55.1 on a 0-100 scale. Therefore, the development of teachers' competence is needed on an ongoing basis. One approach for improvement is education and training, particularly competency-based training. Competency-based training gives participants the skills in planning learning, and exploring and interpreting instructional material in accordance with the demands of competence. A model for improving the competence (and hence quality) of Office Administration Vocational Teachers through competency-based training is considered.

Keywords: competence, teacher, training.

1. Introduction

Progress of a nation depends on the quality of its human resources. Quality human resources are formed through a process of quality education and training. Quality education requires teachers who can carry out their duties in a professional manner.

One approach to improving the quality of teachers is to improve the initial training curriculum. In this paper, however, the focus is on improving the professionalism of vocational teachers who are already licensed and practising, through professional development approaches.

In Indonesia, vocational education is required to produce workers who have the knowledge, attitudes, and skills for work, and also the ability to continue their studies. To produce these graduates, it is essential that teachers must be competent in their field. Therefore, as an example, Office Administration Vocational Teachers (OAVT) must have industry knowledge, attitudes, and skills in order to produce quality graduates who have the education and training required by Indonesian employers of Office Administration graduating students.

The quality of teachers as professional educators is an absolute requirement for the realisation of quality

education. There is no quality education without a professional teacher (BPSDM & PMP, 2012, p.8). Therefore, teachers must have professional attributes and continue to develop them to maintain quality education. Hence there is a mandated quality assurance and improvement paradigm for an effective vocational teaching model.

Although some training has been carried out in Indonesia in order to improve the competence of teachers, it appears the outcomes are still unsatisfactory. This is evident from the results of the initial competency test for teachers in Indonesia in 2012, with the highest average score of only 55.1 on a 0-100 scale (Dzulfikar, 2012). Baedhowi (2009) stated that the teacher competence post-certification score did not show an increase as expected, given that extra emphasis was placed by the Government on improving teacher competence..

There are many teachers who have not reached standard competency in Indonesia. Learning in the classroom is still dominated by the one-way lecture approach (BPSDM & PMP, 2012, p.16). Soedijarto (2008, p.53) in an analysis of results also showed that the learning atmosphere and the learning process is still dominated by the educational delivery model of hearing, notes, and memorisation. This is not the process expected by UNESCO

(Shrimai & Sharma, 2012) through the four pillars of education, namely learning to know, learning to do, learning to be and learning to live together.

Efforts to improve teacher education qualifications through further study also have not had a positive impact on teacher performance. Ipong Dekawati (2011) stated that the effect of teachers' further study on their performance is still not optimal even after they have completed.

Based on the above it can be seen that the teacher's role is very strategic in realising quality education. However, there are still many teachers who do not meet the standards of competence specified. Despite the many efforts made to improve the competence of teachers through further training, they have not been effective. This is presumably because training programs are not aligned to the needs and professional competencies of teachers. The absence of teacher training models that are based on evidence of success, especially for OAVT, is a problem that needs to be resolved. This is supported by Roesminingsih (2008) in stating that there is still teacher inadequacy which must be addressed through further education and training. Thus, the development of training models to improve the competence of OAVT is essential.

2. Vocational education in Indonesia

Vocational education is a form of learning that is receiving attention by many countries. This is because it is now globally accepted that there are direct links between a country's vocational education system and economic and social development. Vocational education should receive careful attention from government, because it has a major role in addressing industry issues and unemployment. Thompson (1972, p.111) states that "vocational education is economic education as it is geared to the needs of the job market and thus contributes to national economic strength". Djojonegoro (1998, p.34) states that "vocational education is education that prepares learners to enter the workforce". Murniati and Usman (2009, p.2) state that "vocational education is education designed to prepare students to enter the specific work, position specific career, or improve the quality of workers in a particular field". Thus, vocational education is education that is closely linked to industry and employment issues.

In the context of Indonesia, the national education system is governed by Law No.20 of 2003 on the National Education System. Formal education in Indonesia consists of the three sectors of elementary education, secondary education, and higher education. Within the latter two sectors are elements of general, vocational, academic, professional, religious, and special education.

Vocational education in Indonesia is delivered in the sectors of secondary education and higher education. Secondary vocational education aims to prepare students primarily for work in a particular area of expertise. Institutions that deliver secondary vocational education in Indonesia are called Vocational Schools. Vocational education in the higher education sector is aimed at preparing learners for employment requiring applied skills equivalent to degree level. These institutions are called Polytechnics.

Vocational Schools in Indonesia are grouped into six areas of industry focus, namely Technology and Engineering; Information Technology and Communication; Health; Arts, Crafts, and Tourism; Agribusiness and Agro-technology; and Business and Management (Premono, 2010). Business and Management is divided into three components, namely Administration, Accounting, and Marketing. Office Administration is a component of the Administration cluster.

According to data from the Directorate of Vocational Schools of Indonesia, the number of Vocational Schools is 10957, and the number of Office Administration Vocational Schools (OAVS) is 2564 (2013). To get a sense of regional scope, the Education Office of Yogyakarta Special Region confirms that there are 28 OAVS with 134 teachers and 4070 students in that region.

3. Mandated competencies for teachers in Indonesia

One of the conditions required of a teacher is competence to achieve national education goals. Sanghi (2004, p.5) states that competence is a set of skills, knowledge, attitudes, and attributes that demonstrate high performance. Amankwah (2011) notes that competence is a combination of knowledge, skills, personality and attitude to enable professional situational work. In Indonesia, in the field of education, competence is defined as a set of

knowledge, skills, and behaviors that must be owned and actualised by teacher professionalism in carrying out teaching duties (Law No.14 of 2005). In conclusion, competence comprises sets of knowledge, skills, and attitudes necessary to do the job professionally.

Thus, a professional teacher should have a broad and deep knowledge of their discipline, good pedagogical skills and commendable professional behavior. According to Sanghi (2004, p.6), a person is considered competent if they are qualified to perform their work in accordance with the specified standards. In Indonesia, it is not sufficient for a teacher to have the required cognitive and psychomotor intelligence alone, but they must have good morals, as teachers become role models for students and society. According to Law No.14 of 2005 on Teachers and Lecturers, one of the characteristics of the teaching profession is a commitment to improve the quality of education through embracing and delivering the values of faith, piety, and morality. Ravik (2005) stated that professionalism of teachers needs to be supported by a code of ethics that provides legal as well as social norms.

Teachers in Indonesia are required to master four competencies as mandated by law. The four competencies are pedagogic competence, personal competence, social competence, and professional competencies acquired through professional education (Law No.14 of 2005).

3.1. Pedagogic competence

Pedagogic competence is the ability of teachers to manage student learning. According to the Decree of the Minister of Education of Indonesia regarding Standards of Academic Qualifications and Competencies of Teachers (Decree MoE 16-2007), pedagogic competencies in vocational schools are stated thus. Teachers should:

- a. allow learners to master the characteristics of the physical, moral, spiritual, social, cultural, emotional, and intellectual;
- b. understand learning theories and principles of learning that educates;
- c. develop curriculum related to the subject matter;
- d. conduct educational learning;
- e. utilise information and communications technology for the sake of learning;
- f. facilitate the development of students' abilities to actualize their potential;
- g. communicate effectively, empathetic, and manner with the students;
- h. conduct assessment and evaluation processes and learning outcomes;
- i. utilise the results of assessment and evaluation for the sake of learning;
- j. take action to improve the quality of reflective learning.

Mastery of pedagogic competence is an absolute requirement for teachers to be able to effectively implement the learning process. Martin (2012, p.43) stated that pedagogical skills are an essential feature for quality teaching. Liakopoulou (2011) lists some of the skills that contribute to the effectiveness of implementing instructional models: developing curricula and school textbooks; understanding learners; applying pedagogical knowledge, and collaboration with colleagues and parents as well as creating a conducive classroom environment. Similarly, Abele, Norwig & Nickolaus (2009) note that in Germany, vocational teachers should have the ability to analyse and reflect normative specifications and pedagogical situations on the basis of pedagogic/ didactic knowledge and empirical findings.

Understanding of educational foundations is a must for the teacher. Without a good understanding, it is impossible for teachers to teach well. Sutirman (2013, p.2) concluded that a teacher should have a good knowledge and skills in the field of education and learning; have a sensitivity and empathy for the condition of students; a commitment to making the learner a quality human being, as well as having the ability to develop and use good learning materials. Similarly, an understanding of the learner is a fundamental aspect. Oliver & Rechly (2007) stated that the ability of a teacher in a classroom to organise and manage the behavior of students is very important. Teachers must understand the development of students, both psychologically and physically, in order to provide proper guidance and direction. Teachers also need to understand the curriculum, to undertake lesson planning, and develop instructional strategies including the design and use appropriate educational media.

Thus, mastery of pedagogical competence will affect the ability of teachers (including OAVT) to implement quality learning.

3.2. Personality competence

Personality competence as a teacher is a set of individual characteristics. According to Decree MoE 16-2007, personality competencies of teachers in vocational schools are stated thus. Teachers

should:a. act in accordance with the norms of religious, legal, social, and national culture of Indonesia; b. present themselves as being honest, noble, and role models for students and the community; c. present themselves as being steady, stable, mature, wise, and dignified; d. show the work ethic, a high level of responsibility, a sense of pride to be a teacher, and self-confidence; e. uphold the professional code of ethics of teachers.

Kheruniah (2013) concluded that a teacher's personality competence makes a significant contribution to a student's motivation and discipline. Chang & Chang (2012) stated that the level of learning motivation directly influences learner satisfaction. Therefore, improvement in a student's motivation can be achieved by the quality of a teacher's personality competence.

A teacher must have a good personality, because a teacher should be emulated by their students and by society. Killen (2013, p.30) describes some of the personalological characteristics of effective teachers, namely: enthusiastic, confident, optimistic, committed, compassionate, curious, patient, and ethical. Forming positive interpersonal relationships between teachers and students is an important factor in creating an atmosphere conducive to learning in the classroom. Teachers must show a concern and care for students (Jones & Jones, 2001, p.83). A teacher who is not honest, not disciplined and possesses other negative traits will not be an authoritative teacher in front of students.

Hence, a teacher's personality can impact on the effectiveness of the learning undertaken. This directly contributes to the quality of the vocational education process.

3.3. Social competence

Social competence is the ability of teachers to be subsumed into, and supported by, the community they serve. For vocational teachers, this would include industry and employers. According to Decree MoE 16-2007, social competencies of teachers at vocational schools are stated thus. Teachers should: a. be inclusive, act objectively, and not discriminatory and show consideration for gender, religion, race, physical condition, family

background, and socioeconomic status; b. communicate effectively, be empathetic, and courteous to fellow educators, staff, parents, and community; c. adapt to duty in the entire territory of the Republic of Indonesia, which has a large social and cultural diversity; d. communicate with the community and other professions orally and in writing or other form.

Fagan (2011) stated that social competence involves many elements, including: the ability to regulate emotions; knowledge and experience of social interactions; and understanding social situations and customs. Vocational teachers should have high levels of aptitude, intrinsic value and social utility value, which all associate with professional commitment (Berger & D'Ascoli, 2012). As social beings, teachers need to interact with others, both within the teaching environment, and within their communities including industry and employers of their students. Hence, a teacher must have mastery of social competencies.

3.4. Professional competence

Professional competence is the ability to master the knowledge and skill of the professional discipline delivered by the teacher. Professional competence by Decree MoE 16-2007 is stated thus. Teachers should: a. master the material, structure, concepts, and scientific mindset that supports the subject matter; b. master the core competence and higher level competence of the subject matter; c. develop teaching and learning materials creatively; d. self develop in a sustainable manner with the professionalism of reflective action; e. utilise information and communications technology.

Sparks (2002) asserts that discipline (vocational) expertise of the teacher is one of the most important variables that influence vocational student achievement. In order to produce graduates who are knowledgeable and skilled in the field of Office Administration, the OAVT must be a master of the knowledge and skills of the discipline.

4. Professional competency of the Office Administration Vocational Teacher

In addition to mastering pedagogical, social, and personal competence, OAVT in Indonesia must also possess the vocational competencies required of employees in the Office Administration industry, in accordance with the National core competency set

for students at OAVS. OAVT in Indonesia must deliver 18 core competencies to their students. These are: 1. Understanding the principles of the administration office; 2. Applying basic communication skills; 3. Applying the principles of co-operation with colleagues and customers; 4. Applying safety, occupational health, and the environment; 5. Operating applications software; 6. Operating presentation applications; 7. Managing office equipment; 8. Performing administrative procedures; 9. Handling document copying; 10. Handling mail / office documents; 11. Managing archival systems; 12. Creating documents; 13. Processing business trips; 14. Managing meetings / conferences; 15. Managing petty cash funds; 16. Providing service to customers; 17. Managing data / information in the workplace; 18. Implementing the administrative office at the workplace.

The core competency set is an industry minimum level for office administrative work. Therefore, for the OAVT to deliver the core competency set to their students, they must also exhibit mastery of the core competencies above.

A competency-based training model for improving the competency of Office Administration Vocational Teachers in Indonesia

Sudira (2009) stated that the concept of competency-based training (CBT) focuses on what learners can do: the ability to behave, think, and act consistently as an embodiment of knowledge, attitudes, and skills possessed. For vocational teachers, CBT puts participants in a mastery role in planning their learning, and exploring and interpreting the necessary learning materials. Mucahy (2000) asserts that CBT is an education and training model that is coherent and universal, and that CBT is an integrated implementation model and can be applied to various fields, including teacher preparation and further study.

Blank (1982, p.26) describes the 12 stages of implementation of CBT. These stages of CBT can be grouped into four phases: analysis, design, development, and implementation and evaluation.

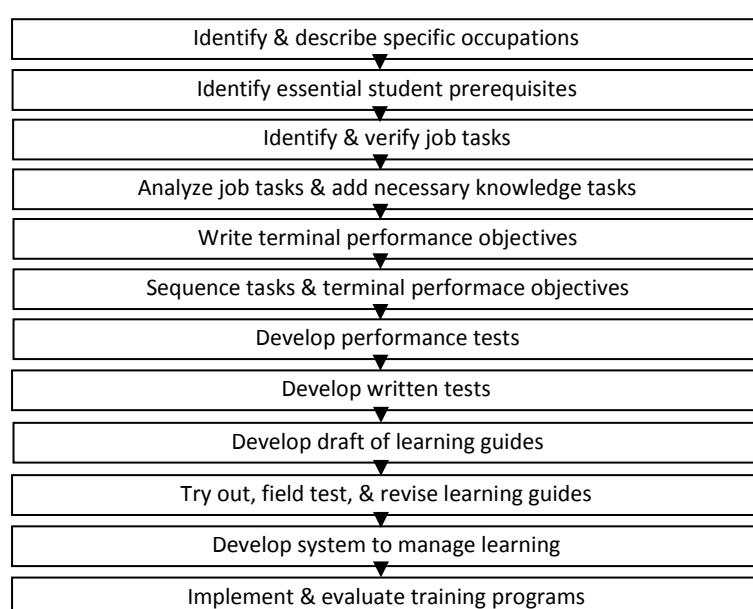


Figure 1. Twelve stages of competency-based training (Blank, 1982, p.26)

Sudira (2009) stated that CBT should be carried out by placing the student as a subject of learning. Learning is focused on the acquisition of job

competence, so that learning objectives should be specific. The learning process should use an individualized approach, using active methods in the

context of industry practice. The vocational teacher acts as a facilitator by providing direct and timely feedback to the students. In addition, modules (as a cluster of skills and underpinning knowledge) become an important curriculum component to guide students in learning. To determine mastery of competencies by students, assessment should be against standard performance criteria. CBT must be implemented with clear objectives and well stated competencies. Learning is done individually with the variety of methods that stimulate the activity of students. Teachers act as facilitators only and receive direct feedback. Teachers assess learning with reference to standard industry criteria (competencies).

Based on the above principles, CBT accords with the principles of adult learning. QOTFC (2005) lists the principles of adult learning: adults are internally motivated and self-directed; adults bring life experiences and knowledge to learning experiences; adults are goal oriented; adults are relevancy oriented; adults are practical; and adult learners like to be respected. Hence CBT is very suitable to be applied in a training program for adult participants undertaking professional development (in this case Office Administration Vocational Teachers).

In addition to the principles as proposed by Sudira and QOTFC above, Mucahy (2000) identified four characteristics of CBT. These are: training for specifically defined outcomes; institution or industry involved in defining the training results; training results illustrate mastery of the competency standards; and training programs based on core competencies for industry organizations.

Mucahy's opinion confirms that CBT should be based on an analysis of an organization's needs. Training results should be meaningful to the improvement of competence in accordance with the standards of competence specified.

For Australia, NCVER (1999) stated that CBT has significant support from Australian industry. Employers, human resource managers, training managers, supervisors and industry training advisory bodies expressed satisfaction with CBT. CBT is viewed more positively by teachers and assessors of private (non-TAFE) providers of vocational education and training.

McAlevy & McAleer (2006, p.22) stated that the CBT model for teachers is based on the assumption that teachers who work in schools require different skills and attitudes compared to vocational teachers. Hence, that the model for the development of

professional competence of vocational teachers should be different. Also, they stated that the training program given to teachers should be adjusted to the level of skills and competence of their job. Teacher training should be customised according to teachers' background experience, knowledge, and their main tasks.

Therefore, CBT is a suitable training model to improve the professionalism of teachers in vocational schools in Indonesia.

1. Developing a model for the professional development of Office Administration Vocational Teachers.

The vocational teacher's job is a dynamic one. Vocational knowledge and skills for the workforce are constantly progressing. Similarly, technological developments in their discipline often change rapidly. It is therefore necessary that coaching and development efforts are ongoing to improve the professionalism of teachers.

Kennedy (2005) identified nine models of teacher professional development. These are: "training award-bearing; deficit; cascade; standards-based; coaching / mentoring; community of practice; action research, and transformative". Based on Kennedy, training can be bundled into one common model to develop the professionalism of teachers.

Smith & Gillespie (2007) distinguish two models of professional development: traditional professional development and job-embedded professional development. Traditionally oriented models increase the knowledge, skills, and competencies of teachers to teach individually and introduce new learning approaches. Implementation of this model is usually in the form of off-site training. The job-embedded model is more directed at improving the quality of student learning and helps teachers to address specific problems encountered. Implementation of this model is typically in the classroom or workshop. Rodrigues (2004) stated that for many years teacher professional development has involved teachers attending conferences, and taking part in seminars, workshops and short courses. These elements of teacher professional development were used to help introduce new policy, new skills, new methods and new knowledge.

In addition, in accordance with the Indonesian Government Regulation No.74 of 2008, teachers also have the opportunity to develop and improve their academic qualifications and competence, as well as for training and professional development in their vocational field. The Government Regulation lists the types of professional development activities that teachers should access. These include further education and training, internships, writing publications and papers, researching and developing innovative pedagogic practices, and submitting for achievement awards.

It is known that further education and training is one form of continuous professional development (CPD) of teachers. Megginson & Whitaker (2004, p.5) state that CPD is a process by which individuals take control of their own learning and development, by engaging in an on-going process of reflection and action. Fraser (2010) concludes that CPD contributed to teachers' views of ideal forms of effective science teaching which differed from the real forms practised in the classrooms. The gap between ideal and real forms arises from a range of social and cultural factors relating to classroom, school and community. This is reinforced through teacher professional development policies issued by the Agency for Human Resources Development and Education Quality Assurance (BPSDM & PMP, 2012, p.19) which state that an increase in the competence of teachers can be gained through various strategies implemented in the form of training and other means. Training programs can be done in the form of in-house training, internships, school partnerships, distance learning, customized training, short courses, and internal coaching by school.

From the above discussion, it is reasonable to infer that a sound approach in developing professionalism of the Office Administration Vocational Teacher is CBT. A possible model is that developed by Blank (1982, p.26). However, CBT for OAVT must involve two parties, namely education experts (university) and practitioners (industry). It should be noted here that Indonesia does not have a well-

defined vocational education sector as other countries eg. Australia, Germany (Section 2). Hence, the key institutions that must be involved in the proposed professional development program are universities and industry.

Jordaan (2009) stated that to achieve high-quality vocational education, it must be done in conjunction with industry involvement through proper job training and/or internships. Tope (2013) said that the three main reasons behind the inability of universities to provide skilled people for industry are problems in designing the vocational curriculum and training methodology, and weaknesses of the vocational teacher as a coach. Industry has a role in resolving the above. To develop pedagogical competence in vocational teachers the university sector should be involved. Whilst for developing industry and work-based competence, the relevant industry should be involved.

Based on these considerations, the authors argue that the optimal model to develop the professionalism of the OAVT is a CBT-based model. The design of this model includes the four stages of analysis, design, development, and implementation and evaluation.

The **Analysis** phase includes: identification of the vocational teacher core pedagogical competencies, identification of relevant industry practitioners to be involved in developing the industry competence required by OAVT, and identification of educational experts who will be involved in designing the CBT program of vocational teacher professional development. The **Design** phase includes: formulating training objectives, preparing a syllabus and a training plan. The **Development** phase includes: development of training materials and training manuals, development of media strategies and training for the teacher, and development of industry performance and teaching performance test instruments. The **Implementation and Evaluation** phase includes: conducting training, evaluation industry performance and evaluation of teaching performance.

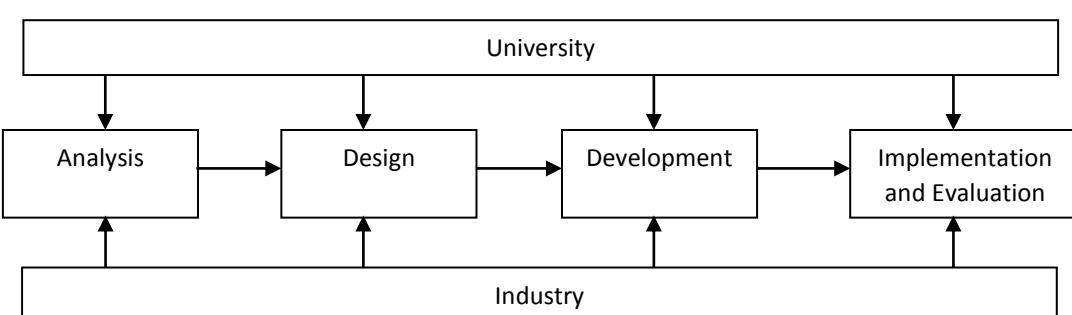


Figure 2. CBT model for professional development OAVT

Figure 2 shows the role of universities and industries ranging from the analysis phase to the implementation and evaluation phase. The following

table (Table 1) lists the 4 phases and the respective university and industry roles.

Table 1: The role of universities and industry in the development of CBT for OAVT

Phase	University roles	Industry roles
Analysis	1. identification of core competencies that must be taught by OAVT 2. identification of relevant education experts to be involved in developing the competencies of OAVT	1. identification of core competencies that must be taught by OAVT 2. identification of relevant industry practitioners to be involved in developing the competencies of OAVT
Design	1. formulating training objectives 2. preparing a syllabus and training plan	1. formulating training objectives 2. preparing a training plan
Development	1. developing training materials 2. developing training manuals 3. developing strategies and media training 4. developing teaching performance test instruments	1. developing training materials 2. developing training manuals 3. developing strategies and media training 4. developing test instrument for workplace performance
Implementation and Evaluation	1. implementing teaching skills training 2. evaluating the performance of teaching	1. implementing job skills training in industry 2. evaluating the industry skills of the student

In general, the role of universities and industry in the CBT-based professional development role for OAVT is similar. But there is a subtle difference. The university's role is to analyze, design, develop, and evaluate in terms of the teaching skills of the OAVT. Teaching skills that must be developed through CBT-based professional development include lesson planning, selecting and using appropriate learning media, selecting and using appropriate learning methods, and assessment. The role of industry is to analyze, design, develop, and evaluate in terms of the industry content knowledge of the OAVT. Industry is responsible for providing knowledge and skills in the field of Office Administration to OAVT.

2. Implementation of the professional development program

It is instructive to outline the CBT model that will be used for the proposed professional development

program. It should be noted that initially the focus will be on Office Administration Vocational Teachers from the school sector (vocational school). CBT model implementation will start with grouping OAVT based subjects taught. This grouping is intended to determine class groups. It is envisaged that there will be around 20 teachers in each class. Participants will be briefed on the technical implementation of the training that will be conducted.

After OAVT understand the concept and implementation of technical training, then they will undertake competency-based industry skills training to enhance their the vocational skills and knowledge that they already possess. For some teachers this will be a 'refresh' of their industry skills base. Industrial skills training instructors are industry practitioners in the field of Office Administration. The industry and pedagogical skills training will be integrated.

Referring to the model of Pedagogical Content Knowledge (Phillips, Miranda, & Shin: 2009), a vocational teacher will ideally have pedagogical knowledge, industry knowledge and skills, as well as an understanding of the context of work in the industry. Therefore, competency-based training for OAVT should start with strengthening the knowledge and skills of the relevant industry, in this case Office Administration. Teachers must be equipped with office administration skills and a good understanding of the context of administrative office work. It is hoped that this new approach to professional development (competence-based, integrated pedagogy and skills mastery) will lead to enhanced quality of the delivery of vocational education for the Office Administration industry in Indonesia.

3. Conclusion

One of the ways to improve teachers' competence is through education and training. A prevalent training model developed for the field of vocational education is CBT. Office Administration is a key industry area taught by vocational teachers in Indonesia, either in the high school environment (vocational school), or the higher education environment (Polytechnics). To improve the quality of office administration vocational graduates, a CBT-based professional development model for OAVT has been proposed. If planned and structured optimally, this will ensure the improving quality of OAVT, and hence the productivity of graduate students working in the industry.

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