Skills Learning Model for Children with Mild Mental Retardation: Best Practice in Vocational Education Management of Mild Mentally Impaired Student
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Abstract

Mild mental retardation children are the children who significantly experience intellectual barriers whose intelligence quotient is in the range of 51-70. Another term for mild mental retardation is ‘Moron Debil’. The main problem faced by mild mental retardation children is that after graduating from school, they find difficulty to continue their education at the tertiary level and to get a job. This paper examines the problem so that the mentally disabled graduates (of mentally retarded schools - SMALB level) get a solution. The problem is caused by the implementation of improper management of mentally retarded children's education. There are some factors causing management not well implemented; the lack of implementation of learning which provides skills to children; the skills provided are also not in accordance with market needs and have not involved the education stakeholders optimally. To overcome these problems, Yogyakarta SLB Negeri 1 has implemented educational management for mental retardation with the following characteristics: a) grouping of study groups based on the skill majors; b) providing vocational skill material based on curriculum analysis from the center and adapted to the input / needs of DUDI actors; c) approach to functional thematic learning processes with skill themes; d) implementing field practice and internships; e) implementing cooperation with DUDI actors. Another problem arises since those programs mentioned above can not be continued at the mentally retarded high schools (SMALB level). It happens because after the child returns to the community there is no follow-up in the form of non-formal education in the family and community, as well as formal education at a higher level of education. In conclusion, mentally retarded children's education until the SMALB level has not provided sufficient access to enter the workforce so several efforts must be made including improving education management at the school level so that the quality of learning is truly focused on providing skills. In addition, further services are pursued in the form of transition and/or education programs at the tertiary level.

Keywords: advanced education; DUDI; mentally retarded children; field practice; internships
INTRODUCTION

This study aims: (1) to map the practice of skill learning management in several special schools in high school level in Yogyakarta recently; (2) to gain information of things needed in developing the skill learning model (3) to create vocational skill learning management model to prepare mild mentally retarded in entering the world of work; (4) and to find out information of the model effectiveness. In general, mild mentally retarded children as special school or special high school graduate have not been able to compete in the world of work, they are jobless with no activity, even most of them play on the road and come back to school. This inability is caused by lack of preparation of mild mentally retarded children and understanding of business agent.

According to the data taken from Educational Primary Data (DAPODIK) in 2017 shows that the number of special need children studying at special school in Yogyakarta is about 5,023. The number covers 12 special schools in Gunungkidul district with 729 children, 20 special schools in Bantul District with 1,531 children, 8 special schools in Kulon Progo District with 532 children, 29 special schools in Sleman District with 1,579 children, and 9 special schools in Yogyakarta with 652 children.

All students consist of Visual Impairment (A) 4.48% (222 children), Hearing Impaired Speech (B) 14.99% (753 children), Mild Mentally Retarded (C) 66.80% (3,355 children), Orthopedically Handicapped (D) 1.87% (94 children), Unsociable (E) 0.78% (155 children), dan Autis 8.84% (444 children). The data shows that the number of mild mentally retarded children is the highest of all. Mild mentally retarded children have the lowest self-reliance level of other special need children. It can be interpreted that if there is no any concern to them, there will be more unemployed special need children. The problem cannot certainly be left alone, but it needs to find out the solution. This study is trying to give contribution to the improvement of the educational management for mild mentally retarded children by giving various applied vocational skills that help them work. the contribution will be about the implementation of management function covering planning, organizing, executing, and evaluating toward vocational skill learning.

According to Rejokirono (2015, p.87-104), the time allocation for skills learning that reaches 70% should be enlarged in the DUDI practice so they will not be awkward if they come to the real work. Field Practice is allocated at least one month in one semester while the technical things are submitted to teachers and employers. Some of the field practices are taken by weekly system and the other one is taken for twice a week in the DUDI.

The result of Mumpuniarti's research (2006, p.16), development of vocational ability of mild mentally retarded student needed a management or development management to get effective and efficient effort. This form of management needs to be undertaken by special schools of mild mentally retarded student by means of cooperation with parents, community service providers, and other professionals, when planning the vocational type to be fostered, resources that can be used, phasing in coaching, addressed with the vocational type, the pattern of implementation in coaching, and evaluation of success.

According to Endang Supartini, Tin Suaharmini & Purwandari (2012), the findings of the study showed that: 1) development of life skill education substance model for mild mentally retarded children was as follows (a) studying the theories of life skills for mild mentally retarded children, (b) studying GBPP Bina Diri for mild mentally retarded
children (d) identifying parents' expectations, (e) identifying students' abilities and potentials, 2) Have teacher the handbooks validated by media experts, and materials reviewers from academic staffs who are educating mild mentally retarded children, headmasters and teachers of SLB, 3) The teacher handbook has been socialized to several SLBs, and several books are placed in the Yogyakarta State University Library.

According to Bilal Dwiko Cahyono (2015), regarding the research data about the influence of life skill educational method on vocational skills of mild mentally retarded students showed that the application of life skill education method can be applied for mild mentally retarded students to improve the ability of vocational skill in making various flavor of banana chips. In applying life skill education methods, there some considerations should be noted in classroom action research: (a) It is necessary to have a systematic, practical, systematic teaching plan that is simple and easy to implement in the field (b) the implementation of life skill education method should be carried out seriously and carefully. There are some considerations in applying life skill education method: (a) Observer must be very careful in giving treatment when seeing the activities during the students working on vocational activities to make various flavored banana chips (b) It is necessary to guide the students' behavior in conducting vocational task of making the chips in the observation. It needs to improve students' behavior.

According to Tukiman & Cepi S. Abdul Jabar (2014, p.128) the results of his research stated that the leadership of elementary school headmaster of Kanisius Sengkan has built confidence and mutual trust between headmasters, teachers and employees. The trust is built primarily through the trustworthy example of the headmaster's own life. The headmaster always seeks a fit between what is said and what is done.

Some of the study results confirm that vocational skills learning for mild mentally retarded children when it is well planned, organized and well implemented, and conducted an evaluation to determine the result outcomes and for improvement, it will produce qualified learning. Education for mild mentally retarded children should focus on the development of proper vocational skills to the child potential and in accordance with the needs of the world of work, as well as provide working experience through field practice and internship in business places.

**RESEARCH METHOD**

The research and development steps of Borg & Gall (2003, p.775) were developed by researchers into 3 stages: (1) Preliminary research to map the current situation and to find out the need for development, (2) model development stage, and (3) model product testing.

**Development Model**

A. Vocational Skills Learning Management Model to prepare mild mentally retarded children to enter the world of work does not stand alone but it is made integrated in classroom learning at SMALB level to improve the quality and relevance of graduates with the needs of the world of work, especially DUDI.

B. Development Procedure

Model development is carried out through three stages: (1) pre-model development stage or preliminary study, (2) model development stage, and (3) validation stage or model testing. The preliminary stage is conducted to determine the current condition of
vocational skills learning management and to know the expectations or needs required for development.

1. Preliminary Study Stage
   a. Literature Study
      The literature study was conducted to collect the supporting materials to make the model draft. Literature study was carried out by studying the books, research journals and articles relevant to the title of this research.
   b. Preliminary Study
      A preliminary study was conducted to find out the current implementation of vocational skills learning management and to find out what is needed for development. Preliminary study included (1) questionnaire distribution, observation and interview to gather the previous information, (2) Focus Group Discussion (FGD) with stakeholders to discuss current skill-learning management conditions and needs for model development; and (3) questionnaires distribution to headmasters, teachers, and parents / families to get additional information about the current condition and needs required for the model development. Research subjects at this stage consisted of 30 school headmasters, 102 teachers of SLB and 33 parents.

2. Development Stage.
   There are some activities conducted in the development stage.
   a. Formulating Model Draft.
      Draft of vocational skill management model in preparing mild mentally retarded children to enter the world of work is created based on the information and input collected from the literature study, FGD, and questionnaire distribution.
   b. Validating Model Draft by Practitioners and Experts.
      Model draft are validated by 14 prospective users (headmaster and teacher) and by 10 expert teams from management, education, special education, vocational skill, and linguistic background. The validation process is initiated by implementing model draft through FGD to obtain some inputs. After conducting FGD, the participants are required to give evaluation seen from the aspect of model systematics, model substance, linguistics, and graphics. The research subjects in this stage consist of 14 practitioners and 10 expert teams.
   c. Revising Model Draft.
      Model revision is carried out based on inputs or guidance from the assigned expert or team. The inputs of the expert team will refine the model draft that is prepared to conduct implementation testing.

C. Model Testing
   Model testing is carried out through three stages: limited testing with the subject of 6 headmasters of DIY area and 6 teachers of SLB in DIY area that conducting SMALB level. Each respondent is given model draft to implement at school. After they implement the model draft for about one to two months, they are invited to discuss their experiences in implementing the model, their inputs to improve the model, and they complete the questionnaire to evaluate the model. The result of questionnaire scores is analyzed to determine the extent to which the model can be implemented while the inputs are discussed to revise the model.
Model testing is also conducted with small group consisting of 12 headmasters and 9 teachers of SLB in DIY. Small group testing is initiated by implementing model draft in 9 SLB that considered having commitment of appropriate education for mild mentally retarded children orienting the development of vocational skill based on market needs or world of work for mild mentally retarded children. The result of questionnaire scores is analyzed to determine the extent to which the model can be implemented while the inputs in the form of oral explanation will be used as the material to revise the model.

The extended testing is carried out with 33 headmasters and 18 teachers of SLB in DIY area in SMALB level. The extended testing will contribute the evaluation of model effectiveness seen from the filled questionnaire while the written or oral inputs during FGD will be used to revise the model. Evaluation points on FGD of the limited testing, small group testing, and extended testing use the same questionnaire that consist of two parts. First part evaluates the model content including 8 items of model systematics, 4 items of model substance, 5 items of linguistics, and 6 items of graphics. Second part evaluates the model implementation consisting of 8 statements or questions, as follows: is the model: (1) needed by the school, (2) important for the school, (3) useful for the school, (4) applicable, (5) simple for school, (6) practicable, (7) easy to apply, and (8) helpful for school. The collected data of the limited testing is ranged at score from 1 to 5. The higher the score achieved, the model is stated well or meet the need of the development of skill learning management model in preparing mild mentally retarded children in entering the world of work. In contrast, if the score is low, it means the model does not meet the need. Score is analyzed for each item and the whole. The overall average score is then converted into percentage to find out whether it has met the need or not.

Furthermore, to simplify the data analysis, score result is converted into percentage. Then it is converted into category. There are four optional items for the score: A for score 4, B for score 3, C for score 2, and D for score 1 that converted into the following intervals 0-25% in very poor category, 26-50% in poor category, 51-75% in good category, and 76-100% in very good category while the five item score has the following options: A for score 5, B for score 4, C for score 3, D for score 2 and E for score 1 with the intervals: 0-20% in very poor category, 21-40% in poor category, 41-60% in fair category, 61-80% in good category, and 81-100% in very good category.

Besides the score, there is also data collected from inputs in descriptive form. These inputs will be used as the materials to revise the model that meet the need.

FINDINGS AND DISCUSSION

The fact at the field showed that there is a few number of mild mentally retarded children graduated from SLB that able to work about 10% while 90% of the rest is unemployed. Furthermore, the researcher conducted observation and interview to find out the implementation of vocational skill learning management. There was some information gathered through the observation and interview; (1) vocational skill learning is conducted at school but it has not organized field practice or internship program at business place or DUDI, (2) the skill material has not adjusted to the market need, (3) the classification of study group relies on the grade level but it does not consider the homogeneity of skill type chosen by the students, (4) school and teacher have not optimized the role of parents and employer in vocational skill learning, (5) school has not empowered DUDI for field
practice and internship program, (6) there is no any powerful commitment yet from the headmaster to prepare mild mentally retarded children in entering the world of work.

The formulated model has the following specifications: (1) vocational skill learning is carried out at school and field practice and internship are conducted at business places or DUDI; (2) skill material is adjusted to the market needs; (3) non skill school subjects are delivered through thematic approach with the themes related to the skills chosen by the students and if it is possible to combine vocational skill subjects with non-skill subjects (Indonesian Language, Mathematics, Science, Social, and Civics); (4) classification of study group is based on the homogeneity of skill type chosen by the student; (5) school and teacher optimize the role of parents and employer to take part in vocational skill learning; (6) school empowers DUDI for field practice and internship program; (7) headmaster should fully committed to prepare mild mentally retarded children in entering the world of work; and (8) education is carried out integrated and continuously from TKLB, SDLB, SMPLB, SMALB, and post school service to accompany mild mentally retarded children in entering the world of work as presented in the following grand design.

Designed integrally and continuously from Special Kindergarten (TKLB), Special Elementary School (SDLB), Special First Secondary School (SMPLB), Special High School (SMALB), and post school service. This design presenting the description to make mild mentally retarded children able to work should be prepared earlier. Each educational level has potential focus to develop. Figure 1 shows that on TKLB orienting learning with playing design, SDLB learning focusing on reading, writing, and counting competence; SMPLB focusing on early vocational competence; SMALB focusing on development of vocational skill competence, continued by transitional service maximally 2 years by school, community organization, and other parties that concern to the mild mentally retarded children future.

The education must be fully organized from TKLB, SDLB, SMPLB, SMALB, transition period, distribution to the world of work, and conducted continuous evaluation to give input for future learning improvement. Problems found when the children entering the world of work will give input for improving learning process at school. The classification of study groups at the SMPLB and SMALB levels is based on the chosen skill type. In one study group can consist of several grade levels, but it has the same choice of vocational skills. Although the children sit in one study group, the material will be tailored to the ability of each child. Between school, parent, and entrepreneur or DUDI should establish a synergistic, mutually helpful, complementary relationship for the realization of quality learning and can prepare mild mentally retarded children to enter the world of work.

The research findings are as follows:

a. **Implementation of vocational skills learning management:** Vocational skills learning materials for mild mentally retarded children are not appropriate to the needs of the world of work / DUDI, and there are too many types of material; Classification of study groups is based on grade level. Children are divided and moved on all types of skills organized by school; A vocational skill learning approach for mild mentally retarded children set thematically with common themes that unrelated to the skills learned is widely implemented in the classroom; Skill learning methods are lecturing, discussion, and task giving; Vocational skills learning assessment for mild mentally retarded children are not appropriately done.
children is carried out through the Learning Outcome Test (semester final test), assessment of school examination; Implementation of field practice and internship is carried through practice in this school. Field practice or internship is not conducted in DUDI; Involvement of the role of parents and employers is limited to membership of the school committee and limited to attend meeting twice a year; The role of the SLB headmaster is not directly involved in skill learning management. He has no commitment to accompany the child into the world of work. He does not have a follow-up program after the child graduates.

b. What is required for model development: Learning materials that fit the market needs, vocational skills material followed by one or two kinds of skills, vocational skills based on the potential or needs of the child; Classification of study groups that provide a lot opportunities as many as possible to children to learn skills, and based on the type of selected skill; A learning approach that can encourage children to master certain skills, and an integrative functional thematic learning approach; Learning methods that provide opportunities for children to master the skill competence, the use of drilling methods; Assessment of learning that does not harm the child, assessing the process, results, and portfolio; Organizing field practice and internship directly in the workplace or employer place with adequate time; Involvement of the role of parents and employer in selecting skill type for children, school activity and field practice or internship, follow up program after school, and giving input to make the skill teaching meet the need; The world of work that facilitates field practice and internship program; The role of headmaster that fully committed in giving service based on children need, able to bring school community in one vision and mission, able to build network with government institution or private one especially business party.

c. What kind of appropriate vocational skill learning management model to prepare mild mentally retarded children in entering the world of work: Model with learning material related to the market need, one or two selected vocational skill types, and vocational skill material that go along with the children potentials or their needs; Model with study group classification which give more chances to students learning skills based on selected skill types; Model with learning approach which supports children in mastering certain skill competence and integrative functional thematic approach; Model with learning method which gives children chance to master skill competence and the use of drilling method; Model with advantageous learning assessment, assessment through process and result, and portfolio; Model with the organization of field practice and internship directly in the workplace or employer place with adequate time; Model with the involvement of the role of parents and employer in selecting skill type for children, school activity and field practice or internship, follow up program after school, and giving input to make the skill teaching meet the need of the world of work, and facilitates field practice and internship; Model with The role of headmaster that fully committed in giving service based on children need, able to bring school community in one vision and mission, able to build network with government institution or private one especially business party.

The score results of limited testing evaluating of the content of the model describe as follows; score 1 there is no one choosing (0%), score 2 there is no one choosing (0%),
score 3 there is no one choosing (0%), score 4 reaches 51.45% dan score 5 reaches 48.55%. This result shows that the model is appropriate and it can be used.

While the score average of each aspect can be described as follows: aspect of model systematics reaches score average 4.50 (90%), aspect of model substance reaches score average 4.45 (89%); aspect of linguistics reaches score average 4.43 (90.6%); and aspect of graphics reaches score average 4.57 (89.4%). The score average from the whole aspects of small group limited testing is 4.49 or 89.75 of the highest score 5 or 89.75%.

The result shows that aspect of model systematics, model substance, model linguistics and model graphics reaches a very high score. It means all aspects are appropriate component to be the material or content of the vocational skill learning management to prepare mild mentally retarded children in entering the world of work. Furthermore, it is presented the result of model applicability testing. Model applicability is meant to find out how effective the model applied at school. There are 8 items of statement filled by the prospective user to measure the model applicability.

The score result of limited testing evaluating of the model applicability describes in the percentage of score 1 there is no one choosing (0%), score 2 there is no one choosing (0%), score 3 there is no one choosing (0%), score 4 reaches 18.75%, and score 5 reaches 81.25%. The percentage result shows that model draft facilitate school in vocational skill learning management and really required. While the score average of the whole 8 items is 4.81 of the highest score 5 (96.28%).

The result shows that model of vocational skill learning management to prepare mild mentally retarded children in entering the world of work can be applied in a very good category and in general, this model is helpful, facilitating, and well applied. The whole aspects consisting systematics, substance, linguistics, and graphics reach very good score with the lowest score 4.45 and the highest one is 4.50 of the highest or maximum score 5.

The extended testing involves 30 participants consisting of headmaster and teacher of 18 selected SLBs in DIY. The selected SLBs are assigned based on the track record that those schools have paid attention toward vocational skill learning, and fully committed in preparing mild mentally retarded children in entering the world of work. The third testing is conducted by organizing FGD initially about the implemented model and questionnaire distribution to find out whether the model can be applied. Testing process of the extended testing is initiated by applying model, FGD and ended by questionnaire distribution. Testing is initiated by applying model and ended by completing questionnaire of 4 aspects covering 23 items to evaluate the content of the model, and 8 items of model applicability.

The extended testing involves 33 respondents of headmaster and teacher from 18 SLBs which conducting SMALB level for mild mentally retarded children, and already applied model draft of vocational skill learning management to prepare mild mentally retarded children in entering the world of work. The score result of limited testing evaluating of the content of the model describes in the percentage of score 1 there is no one choosing (0%), score 2 there is no one choosing (0%), score 3 there is no one choosing (0%), score 4 reaches 46.09% and score 5 reaches 52.61%. The result shows that model is appropriate and it can be applied. The score average of each aspect on questionnaire 1 is as follows: aspect of model systematics reaches 4.55; aspect of model substance reaches 4.66; aspect of linguistics reaches 4.60; and aspect of graphics reaches 4.67. The average of the
The score result of limited testing evaluating of the model applicability describes in the percentage of score 1 there is no one choosing (0%), score 2 there is no one choosing (0%), score 3 there is no one choosing (0%), score 4 reaches 39.17%, and score 5 reaches 60.83%. while the average score is 4.61, in percentage shows 92.18% under very good category. The percentage result shows that model draft facilitates school and really required.

The impact of changing the vocational skill learning management can be seen from several indicators below:

1) Empowerment of active communication among teacher, parent, and employer in educating and training children to be skillful and adjusted to the need of market and children.
2) Empowerment of active and harmonic communication between mild mentally retarded children and business party so it can improve children’ confidence, and employer ‘s understanding to the children.
3) Forming the fully committed community in giving mild mentally retarded children space and chance to work in each activity involving them as part of the activity.
4) Proving some of mild mentally retarded children that can work as follows:
   a) Sahid Gurid works for grocery store on Jl. Imogiri Timur Yogyakarta, responsible for distributing to the distributors.
   b) Febriansyah Andrianto works for company of Sabun Nuansa Wangi Alam in Gunungpati Semarang, responsible for production and packing process.
   c) Nanang dan Fajar Nugroho work for Bixa Batik (natural colored Batik), responsible for slamming and other process.
   d) Four children (Sahid, Eko, Darmaji, dan Faldian) had got internship in Sidomuncul Pupuk Nusantara Semarang, for two months and stated pass in satisfied category can adapt well, work well, and given chance to be permanent employer.
   f) Hari Prasetyo works for Batik Gaul in Malangan Banguntapan Bantul, fashion and embroidery factory.
   g) Purbo Tri Laksono opens motor, car, and carpet wash at his home gaining fully support from his parents.
   h) Establishment of Educational and Empowerment Foundation of Indonesian Special Mild Mentally Retarded Children (YAPPASTI), that becomes pioneer and educational consultant for mild mentally retarded children by implementing model of vocational skill learning management to prepare mild mentally retarded children in entering the world of work and supports the community establishment that gives space and chance to children work. The YAPPASTI guided children consist of 30 children that being prepared to work.
CONCLUSION

The research product is the model of vocational skill learning management to prepare mild mentally retarded children in entering the world of work. The model is ensured as one of the solutions to overcome problem faced by the alumni of SLB who have not got empowerment optimally. Model of vocational skill learning management to prepare mild mentally retarded children in entering the world of work is a kind of comprehensive, integrated, continuous, and functional learning. In this model, learning involves the active role of family, business party, and community and oriented to children ability and their need to master certain vocational skill as the preparation entering the world of work.

Model of vocational skill learning management has been arranged through a long process from need analysis, writing model draft, model validation, model revision, field testing, and revision of final model. Therefore, model has been adjusted to the need of prospective user as involving teachers, headmasters, parents, and stakeholders of the related education.

The model has the following specifications: vocational skill material has been adjusted to the need of DUDI or market so the students’ vocational skill competence appropriate to the need of DUDI or market; study group classification is based on the similarities of the skill types not on the class grade; the use of thematic learning process approach with the relevant themes of skill; the use of skill training method (drill method); The implementation of portfolio learning evaluation; the organization of field practice (PKL) and internship at DUDI; the participation of parents and employer role in vocational skill learning; and the existence of headmaster role who can implement management function well.

Implication

The implementation of the model of vocational skill learning management to prepare mild mentally retarded children in entering the world of work optimally has several implications as follows: Headmaster should have vision and mission and strong desire to bring skillful mild mentally retarded children and ready to enter the world of work by establishing a big cooperation between parents and employer; Schools have the courage to implement learning by prioritizing the development of vocational skills and increase learning directly in places of employers; Schools use a modified curriculum by providing adequate vocational skills content, tailored to the child's potential and potential environments including market potential; The headmaster is dare to step out of the monotonous learning to take concrete steps to provide the children, experience of conducting business training in business premises, and tries to empower or distribute to work; Families, especially the entrepreneurs should provide opportunities for children to work, or provide work training, and universities provide opportunities to continue their education at the tertiary level.

BIBLIOGRAPHY


