The implementation of Self-Assessment of Student with Special Educational Needs at Inclusive School

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Abstract— This research aims to find out the implementation of self-assessment and ability of self-assessment of student with special educational needs (SEN) at inclusive school. This research applies study-case approach to 10 SEN with mental retardation variation, autism, muscular dystrophy, slow learner, and low vision in semester 2 in 2017/2018 school year in Tumbuh High School (THS). This article defines the implementation and ability of self-assessment of SEN viewed from aspects of attitude, motivation, anxiety, concentration, time-management, self-assessment, and searching of learning source. The research results show that the ability of self-assessment is quite varied since THS applies the medium self-assessment with project strategy adapted from International Middle Years Curriculum (IMYC).

Keywords— self-assessment, SEN, inclusive school

I. INTRODUCTION

The ability of self-assessment is important skill to get good achievement at school as well as the main source to run for the living. Self-assessment is higly needed to form self-concept so that SEN, in the learning process, must develop this skill at school. Based on the government policy, SEN deserves various services to accomodate needs. However, the fact on the ground shows that many teachers are not ready yet to accept SEN [1]. The lack of teacher competences handling SEN Tarnoto in [2], and the lack of team-work and collaboration [3]. Hence, SEN is judged to be incompetent since they have limited skill of self-assessment resulting to the less support of gaining the existing target of education. With that negative stigma, SEN will be struggling to actively participate, hence, result to social and personal issues at the class.

The ability of self-assessment is part of self-regulation Schunk in [4] having five domains : biological, emotional, cognitive, social, and prosocial domains Shanker, in [5] which help student to manage need, attitude, and emotion to keep relax [6],[7]. Self-assessment will create positive personality Wesson, in [8] since the self-concept develops through constant self-assessment in various situations by measuring verbal and non-verbal reaction from significant people to make judgments [9]. This ability limitation of self-assessment has impact on social interaction which is more segregated, accomplish the test as what it is, the lack of enthusiasm of remedying learning outcome, and the lack of having social sensitivity.

Various ways can be conducted to improve self-assessment such as requesting student to review the portfolio result and choosing the best result [10], fulfilling simple questionnaire using gradual instruction [11], systemic instruction [12], and designing learning process in the frame of UDL [13]. The increase of self-assessment for SEN can be achieved with various strategies, followed by creative initiative, considering the individual condition since the beginning, developing models by research, and necessarily identified and practiced with various approaches. Based on the above explanation, researcher is eager to find out the implementation of self-assessment and ability of self-assessment of SEN at THS.

The rest of this paper is organized as follow: Section II describes the literature review. Section III describes the proposed research method. Section IV describes the research finding. Finally, Section V concludes this work.

II. LITERATURE REVIEW

This section presents the literature review.

A. SEN Self-assessment

Self-assessment is a long process since it is related to self-improvement and children achievement since they were kids. Psychoanalytic theory reveals that children attitude is controlled by strongly unconscious encouragement Freud, in [14] and affected by the social environment and through development crisis [15]. The concept of behaviorism states that environment plays its role as the controller of attitude and individual is the responder [16]. The process of cognitive development starts with adaptation, assimilation, accommodation, and balance enriched by social interaction [17]. Some theories of the early researchers reveal that cognitive development of the children has two directions, which depend on the individual and social circumstance possessing complex and casual characteristics.

Self-assessment is related to cognitive development so that SEN with cognitive disability often has trouble in self-evaluation [18],[19],[20]. The progress of self-assessment is formed in the beginning of life which is extremely affected by factors of physical, psychological, and psychosocial. If those three factors undergo obstacles, then it will result to abnormal patterns, for examples low self-concept and self-esteem. These abilities will interact each other so that bad self-esteem will result to the bad ability of self-assessment as well.

The characteristics of SEN who have bad self-esteem must be balanced with the effort to improve the ability of self-assessment with various modifications. The implementation of self-assessment can be conducted by
having low ability Panadero, et al. [32], so it is needed to pay attention to the instructional strategy, learning source, learning task, assessment tools accommodating needs, and learning style. Assessment at inclusive school offers special arrangement or adjustment in the assessing system, involving different methods of assessing, enabling student to choose and use various modalities to remove obstacles, in levels based on condition [33].

III. RESEARCH METHOD

This study case applies mixed method with observation activity of participation, interview, documentation, and literature review. The research is conducted in the even semester in school year 2017/2018 at THS located in Jl. KH. Ali Maksum, Panggungharjo, Sewon Bantul. The subject of research is 10 students of SEN varied from students with mental retardation (3 students), autism (3 students), muscular dystrophy (1 student), slow learner (2 students), and low vision (1 student).

IV. RESEARCH FINDING

This section presents the research finding used

A. The education in THS follows the pattern and process of education in IMYC, which are the big idea, entry point, knowledge harvest, learning goals, research and record learning activities, reflective journaling, assessment for learning, and exit point. Each unit consists of main theme which has main idea to challenge student to relate with real lifes. The themes learnt are designed within six months containing student purpose in every school subject. One of the stages that can improve ability of self-assessment and self-efficacy is reflective journaling (Bankeng, 2015; Lopez 2015), proceeded with exit point that gives opportunity for the student to conduct collaboration project. In the final stage, there is learning activity conducted by a team of teachers and students.

The cycle of IMYC learning process give flexible space for the teachers to design learning in the scopes of improving knowledge, skills, and understanding [34]. The learning designed must prioritize meaning, correlation, context, and cooperation. Related to this, learning in the class must be able to make the student to accomplish collaboration of theme, not limited to one school subject. Project-Based Learning (PBL) then emerges to bridge materials learnt to achieve correlation.

PBL is chosen as one of the interesting solutions in implementing self-assessment for SEN since it can enhance self-efficacy Filippatau and Kaldi in [35], involvement Salam et al. [36], and more contextual [37]. PBL is conducted with interdisciplinary, student center and practice with real problems based on student understanding [38],[39]. The concrete activities from the projects that can be done are that the school can provide the space to exhibit portfolio of the student so that SEN can communicate the processes and results of the teaching-learning activity, such as in the activity of the end of semester celebration. The school agendas are designed based on projects, for example the planting of mangrove, business day, documentary film festival, as well as literacy day.
The aim and concept of the project designed is delivered clearly to student in order to build preliminary concept of learning and get student’s attention. The aim of learning must also be conveyed so that student understands what to do. Innovative and applicable design keeps being improved since new programs will develop the ability of human brain in finding solution of social problems. This ability to find solution must be accustomed in the school environment.

The phase of self-assessment at THS is determining the condition of student self-esteem. This student self-esteem is used to determine the assessment format that can be reached by the student so the aim of assessment can be achieved. There are some rules in determining self-assessment for SEN, which are instructional aim adjusted to all students, using various methods and materials in the instruction to give discretion to fulfill all students’ need, using flexible assessment so the students can show their learning accurately in order not to be hampered by the students’ disability, and give positive reinforcement for SEN so it is expected to elevate self-esteem.

B. Ability of self-assessment of SEN

Ability of self-assessment (self-evaluation) is part of self-regulation of the student Schunk in [4], with five domains which are biological, emotional, cognitive, social, and prosocial [5]. Self-regulation is a process which helps student to manage needs, and attitude Zunbrunn, et al., [6], manage minds [40], to enable controlling emotion and pressure [41]. This self-regulation is also related to self-concept and self-esteem so before the children can evaluate themselves, that ability must grow well inside the children.

The ability of self-assessment cannot be separated from cognitive development of SEN. The cognitive development is change of skill capacity of mental pattern, especially on perception and sensory experience got from environment [20],[42]. The cognitive condition of children is determined in the early of life Piaget [43] related to biological maturity, activity, social experience, and equilibration with the stages of sensor motoric, pre-operation, concrete-operation, and formal operation [44]. For SEN with cognitive obstacle, the cognitive development experiences obstacles since the beginning in the stage of motoric sensory resulting in difficulty of imitation, memory, and mind.

The process of putting in information to SEN with cognitive obstacle is clogged up since the beginning, Gumbiner in [45], states that the process of informing SEN is clogged up in the stage of sensory register. This stage is a process of entering information to minds through senses. During this period, children will develop object permanence Woolfolk, in [9] which is the start of constructing mental representation. The SEN have trouble in accomplishing register sensory so that it will impact on the failure of storing long-term memory.

Based on the failure of sensory register stage, SEN with cognitive obstacle will experience obstacle in behaving to respond with environment. Bandura in [46] states that aspects of cognitive, attitude, and environment will interact each other so that if cognitive aspect is hampered, other aspects will also be hampered. The failure in responding this environment is caused by memory, perception, motoric development, and intellectual activity so that it affects to the ability of self-regulation to improve unwell.

Self-regulation consists of three fields which are cognitive, motivation, and metacognitive (self-assessment). For SEN, this ability of self-assessment can be accomplished by optimizing the effect of environment in order to build the good self-concept [47]. In the learning, the analysis can be made in attitude, motivation, anxiety, concentration, time management, self-testing, and study aids. Periodic observation is conducted to 10 SEN in Inclusive school with the grade interval 7-12.

From the sheet of self-assessment, the aspect of attitude consists of three statement, which are student wants to get good score, student is enthusiastic during the learning, and student is courageous to make questions when there is problem. The aspect of motivation consists of two statements which are they want to finish the assignment on time and remedy if there is correction. The aspect of anxiety consists of being careful in accomplishing the task and letting teachers know if there is any equipment/paper missing. The aspect of concentration consists of statement of paying attention to the teacher when being explained and focusing when accomplishing the task. The aspect of self-testing consists of two statements which are preparing equipment’s needed and commenting if there is lack of equipment’s.

Student DD, ST, and BN are categorized mental retardation based on the result of assessment during the registration. DD has stable ability of self-assessment from week 1 to week 7, which is 26.67%. However, DD experience a decrease in week 4 at 20%. Student DD has lack of motivation for not finishing assignment on time and un-enabling to remedy mistake during working on the assignment. Student DD is not careful and understanding about the stationary which is about to use. DD’s concentration is so easy to get distracted, not paying the attention to the teacher when being explained, and not telling teacher if there is lack of stationary. From the observation result, DD is categorized to have lack of self-assessment.

Student ST has ability of self-assessment at 46.67% and experience an increase in week 7 at 55,53%. ST frequently experiences unmotivated when learning, being confused with the appropriate tools to make a creation, being unable to imitate examples from teachers, and having tendency to talk too much. Student ST also has fragile concentration, unable to revise the work performance, and is unwilling to start accomplishing the task. Based on the observation result, ST is categorized to have lack ability of self-assessment.

Student BN has ability at 60% and it decreases in week 7 at 53,33%. Student BN does not start soon to accomplish the
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AO has ability of self-assessment at 66.67% and still at have lack ability of self-assessment. Based on observation result, BN is categorized to have lack ability of self-assessment. Students GB, DN, and RH are categorized autism based on assessment result during the new student registration. GB has ability of self-assessment at 40% in week 1 and decreases in week 7 at 33.33%. Student GB does not have effort to finish the task, easily distracted, and does not pay attention to the teachers to get satisfying project result, and only uses stationary he knows. GB does not have initiative either to revise the work. Based on observation result, GB is categorized to have lack ability of self-assessment.

The DN has ability at 46.67%, experiences a decrease in week 4 at 40% and increases in week 7 at 66.67%. DN has enthusiasm during the lesson but feels confused on what to do when accomplishing the project assignments. Student DN only uses some tools and does not realize if there is lack of tools. DN does not immediately start accomplishing the task and frequently does not finish the task on time. Student DN often feels confused if there is any task demanding analysis. Based on the observation result, student DN is categorized to have good ability of self-assessment. RN has ability at 60% and increases at 86.67%. RN is enthusiastic during the lesson and finding out what tools used when accomplishing the task. Student RN immediately starts accomplishing the task and finishes it on time. Student RN is also able to revise the task by paying attention to the examples from teachers. Based on the observation result, Student RN is categorized to have very good capability of self-assessment.

Student AD has muscular dystrophy and uses wheelchair. Student AD has ability of self-assessment at 66.67% and increases at 80%. Student AD knows which tools to use when accomplishing the task, asks if feeling any problem, can collect the tools which will be used to accomplish the task. Student AD also focuses in accomplishing task, discipline, but sometimes the attention is distracted if there are other students bothering. Based on the observation result, AD is categorized to have very good ability of self-assessment.

Student ZF and AO are categorized slow learners based on observation result, interview with teachers, and analysis of learning outcome documentation. Student ZF has ability of self-assessment at 60% and experience decreases at 40%. ZF knows which task given in order needs to be done immediately. Student ZF can create a work by examples, looks focuses in the beginning but often losing focuses in the end. ZF is careful in accomplishing the task but losing the enthusiasm of accomplishing the task in the end of activity. Based on observation result, ZF is categorized to have lack ability of self-assessment. AO has ability of self-assessment at 66.67% and still at 66,667% in week 7. Student AO intends to get good score when accomplishing the task, but sometimes is unable to finish it on time. AO often feels confused with the tools used and needs someone else as a reminder. Student AO sometimes loses the focus if getting confusion in a long time. Based on the observation result, AO is categorized to have good ability of self-assessment.

Student ER is categorized as a low vision from observation result. Student ER has ability at 60% and has tendency to increase at 86.67%. Student ER is enthusiastic during the lesson and wishes to get good score. Student ER knows the tools used to create a work, immediately work on the task, but sometimes not being on time in finishing it. Student ER can work on the task by examples and able to revise the task. Based on the observation result, ER is categorized to have very good ability of self-assessment.

From the Figure 1, some challenges observed when conducting self-assessment of SEN are, (1) kinds of SEN in THS are so varied, (2) it is necessary to have long time in observing to get the right data, (3) some teachers equalize the instructions for all children, so students having cognitive obstacle do not understand the instruction, (4) some teachers still rely on Shadow Teacher to explain the instruction to SEN, (5) SEN still has low self-esteem so sometimes they feel confused on self-assessment although it is already simplified in its format and language.

V. CONCLUSION

Self-assessment at THS can be conducted integrated with the learning based on project with the cycles of big idea, entry point, knowledge harvest, learning goals, research and record learning activities, reflective journaling, assessment for learning, and exit point. Each unit consists of main theme which possesses main idea to challenge the students relating it to the real life. In the beginning of learning, schools analyze self-esteem of the students so that they can design assessment which is able to be reached by the student’s condition. Based on observation, the ability of self-assessment is so varied depend on the kinds of flaw.

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