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Implementation of A Token Economy Technique to Reduce Off-Task Behaviour among Students with Low Vision

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Abstract—The results of the preliminary study showed that students with low vision often shows off-task behaviour. Therefore, a specific strategy needs to be sought to overcome it. This study aims to determine the effect of the use of token economic technique on decreasing off-task behaviour of a student with low vision at a special public school for the blind in Bandung, Indonesia. This research was applied the Single Subject Research (SSR) approach with the ABA design. Data collection were done through observation. The result of the study showed that the use of token economy can reduce the frequency of off-task behaviour for a student with low vision. Thus, this technique can be used as an alternative in overcoming off-task behaviour for students with low vision.

Keywords—student with low vision; off-task Behaviour; Token Economy Technique

I. INTRODUCTION

Learning in school depends not only on the contents of the curriculum and how relevant they are but also on the ability of the teacher; there are also other conditions which affect student performance. One of the conditions is how focused students are on performing their tasks ([1]. Focus is defined in this case as the ability to select and concentrate exclusively on certain information [2]. Being able to focus on the learning process is essential. If a student is not focused on the task; the time spent on-task decreases; as does learning [3].

We can; therefore; distinguish between two types of behaviour in the classroom: on-task and off-task. Time on-task [4] is the time spent focused on an activity and is a determining factor in student achievement. Time off-task is the time spent on things other than the learning task [5] and is associated with the low academic performance [6]. Off-task behaviour can be seen as a regulation device for students; where they take a break from the pedagogical activity [7]. It includes actions such as talking with a classmate (or teacher); playing with other objects; or being disruptive [8]. Off-task behaviour is considered a significant problem in teaching; as well as a concern for teachers [6]. Off-task behaviour that involves an academic conversation between students may benefit learning; despite interrupting the class [9].

Off-task behaviour that is often performed in the subject of this research is to leave the seat and speak without permission; meaning that children often speak spontaneously outside the learning material provided by the teacher. Unwanted behaviour or off-task behaviour must be given immediate treatment or intervention to help children to learn well in class. Off task behaviour can be measured by the frequency of appearance of behaviour at a certain time; so that off-task behaviour can be reduced or reduced using behaviour modification technique. The technique used to reduce off-task behaviour is to use a token economy technique. A token economy technique is a behaviour modification technique by applying system reinforcement if desired or desired behaviour arises. If the desired behaviour appears; then students are given one 'token' marker that can be exchanged for the desired object based on agreed rules.

II. METHOD

The method in this study was the experimental method; using the A-B-A design SSR. The design was chosen to reveal the influence of tokens technique on reducing the task behaviour of participants; before and after the intervention. According [10] argues that the design of A-B-A is one of the developments of the basic design of A-B; this A-B-A design has shown a causal relationship between the dependent variable and the independent variable. The basic procedure is not much different from the A-B design. It is just that there has been a repetition of the baseline phase. At first; the target behaviour is measured continuously at baseline (A1) with a certain period than in the intervention condition (B). In contrast to the A-B design; in the A-B-A design; after measurement in the intervention condition; (B) the measurement in the second baseline condition (A2) is given. The addition of the second baseline condition (A2) is intended as a control for the intervention phase so that it is possible to conclude the functional relationship between the independent variable and the dependent variable. The data collection is done through observation with a unit of measure frequency.



III. RESULTS AND DISCUSSION

A. Result

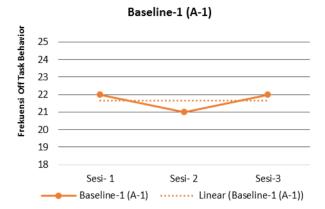
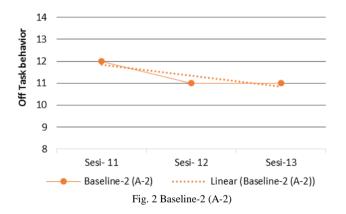


Fig. 1 Baseline-1 (A-1)

Data acquisition in the first session shows the frequency of occurrence of off-task behaviour as many as 22 times; in the second session the emergence of off-task behaviour decreased when compared to the first session which was 21 times; and off-task behaviour that was raised by the subject 22 times.

Baseline-2 (A-2)



- 1. The first session of the intervention; the task behaviour appeared 18 times.
- 2. The second session of the intervention; the emergence of off-task behaviour decreased when compared to the first session; which was 16 times.
- 3. The third session of the intervention; the emergence of the behaviour of the off-task is back up as much as 17 times.
- 4. The fourth session intervenes; the off-task behaviour that appears is the same as the second session; which is 16 times.
- 5. The fifth session of the intervention; the emergence of off-task behaviour again decreased by 15 times.

- 6. The sixth session of the intervention; the off-task behaviour that appeared during the intervention was the same as the fifth session; which was 15 times.
- 7. The seventh session of intervention; the frequency of off-task behaviour appears to decrease; which is as much as 14 times.

The following is a graph of recapitulation of results that

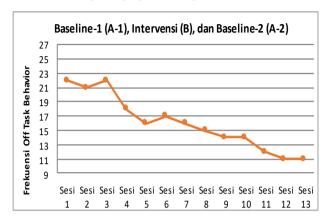


Fig. 3 Baseline-1 (A-1), Intervensi (B), dan Baseline-2 (A-2)

shows an increase from the baseline-1 phase; intervention; and baseline-2.

Overall results obtained in baseline-1 (A-1); intervention (B); and baseline-2 (A-2) conditions can be concluded that there was a decrease in off-task behavior after being given a token economy technique.

B. Discussion

The results of observations in the baseline-1 phase showed off-task behaviour observed every 10 minutes in 1 hour; the first session the frequency of off-task behaviour was 22 times; the second session was 21 times; and the third session time 22 times. In the intervention phase; 7 seven sessions of the emergence of the off-task in 1 hour experienced a decrease in frequency; namely 18 times; 16 times; 17 times; 16 times; 15 times; 15 times; and 14 times. In the baseline-2 phase (A-2); where this phase is the last phase where the researcher reobserves which aims to control after being given the intervention; the emergence of off-task behaviour within 1 hour is 12 times; 11 times and 11 times.

The results of the analysis in conditions; the acquisition of initial data until the initial data collection until the final data collection; the acquisition of data must be stable. If the results in the baseline phase-1 (A-1); the data obtained is stable; then the research continues in the next phase; namely the intervention phase (B). In the intervention phase; the tendency of the direction decreases and means that the direction trend in this phase improves; in the intervention phase (B) the level changes (-4) and the intervention is stopped until the data acquisition is stable. In the baseline-2 phase (A-2); the tendency of the direction is decreasing. It means that there is an improve with changes in levels as much as (-1) and means to decrease.



The off-task behaviour studied consists of two aspects; namely the aspect of leaving the seat and talking without permission. In the aspect of leaving the seat; there is a decrease in the frequency of appearance of the behaviour from the baseline-1 (A-1) phase to the baseline-2 (A-2) phase 7 times. Whereas in the aspect of speaking without permission; there was a decrease in the frequency of appearance of the behaviour in the baseline-1 (A-1) phase to the baseline-2 (A-2) phase 4 times. So; overall; the frequency ratio of the emergence of off-task behaviour in the baseline-1 (A-1) phase with baseline-2 (A-2) decreased 11 times. Based on the data analysis; there is a decrease in the frequency of appearance of off-task behaviour.

IV. CONCLUSION

Based on the problems experienced by a student with low visions in the teaching and learning process; namely the off-task behaviour. Off-task behaviour can be seen as a regulation device for students; where they take a break from the pedagogical activity [7]. It includes actions such as talking with a classmate (or teacher); playing with other objects; or being disruptive [8]. Off-task behaviour is considered a significant problem in teaching; as well as a concern for teachers [6]. Off-task behaviour that involves an academic conversation between students may benefit learning; despite interrupting the class [9].

[11] specific examples of off-task behaviour included repetitive pencil tapping; head or leg shaking; and fidgeting; drawing on himself or materials; talking out; gazing around class; leaving the assigned instructional area; making audible vocalizations not related to the instructional task (e.g.; singing; humming; or talking back); and not following directions. Concerns about off-task behaviour are reinforced by recent findings; which indicate that going off-task is detrimental to learning. There is also evidence that off-task behaviour may be associated with students' emotional states; such as boredom and frustration [7].

Off-task behaviour that is often done in the subject of this research is to leave the seat and speak without permission; meaning that children often speak spontaneously outside the learning material provided by the teacher. Unwanted behaviour or off-task behaviour must be given immediate treatment or intervention to help children to learn well in class. The intervention given can be in the form of applying technique in behaviour modification. According [12] states that "behaviour modification is a form of change due to modification efforts". In connection with the theory; [13] defines behaviour modification as one of which is "empirical use of behavioural change technique to improve behaviour

through positive reinforcement; negative reinforcement; and punishment".

The technique that will be applied in reducing the behaviour of the off-task is a token economy technique. According to Garry in [14]; interpreting "token economy technique is a system of reinforcement for behaviour that is managed and changed; one must be rewarded/given reinforcement to increase or reduce the desired behaviour".

The token economy technique that will be applied is closely related to tokens or prizes; if the subject can sit quietly in the chair; does not speak spontaneously or does not speak without permission during the teaching and learning process; the subject will get a token in the form of pieces. The chip tokens that have been collected by the subject will be exchanged for prizes based on the previous agreements.

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