Token Economy

Definition

A token economy is a system of individual reinforcement of target behaviors in which tokens are administered and exchanged later for backup reinforcers. To be successful, a person must be reinforced for increasing or decreasing existing behavior as well as successive approximations of the behaviors we wish to establish. Common forms of tokens are plastic or metal circular chips, marks on a blackboard, points marked on a paper point card, stars, holes punched in a card, stickers, paper clips, beans in a jar, happy faces, and play money. Token systems may not deprive students of their individual rights. Individual program plans rather than group token systems must be used for management of problem behaviors.

Things to Do

✓ Pinpoint behaviors to be changed.

✓ Build the token economy.

✓ Implement the program.

☑ Pinpoint behaviors to be changed.

Determine the behaviors to be changed through the use of the token economy. Token economies can be successful in influencing academic, social, and classroom skills. Define them in specific, observable, and measurable terms to facilitate consistency of implementation among staff. Also, behavioral pinpoints will prevent confusion among students regarding the behaviors of which they can earn tokens.

☑ Build the token economy.

Select Tokens

Start by selecting what type of token you want to use. For instance, objects, such as play money, beans or marbles in a jar, pennies, or plastic chips, are all excellent devices, but use caution when working with younger or disabled students who may swallow or lodge them in their nose or ears. In this case, happy face stickers, holes punched in a card, or points on the board might better serve these students.
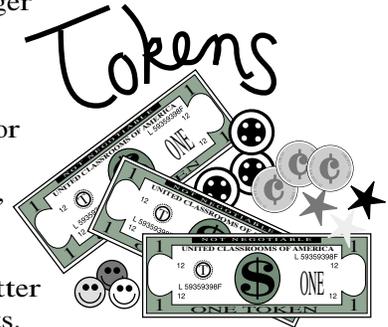
easily dispensed
hard to count
safe to use

Overall, many items work well as tokens as long as they are *easily dispensed, difficult to counterfeit, and safe to use*.

Select Reinforcers

When the token system is in place, students will periodically exchange their tokens for reinforcers, so the reward must motivate students to do whatever is necessary to earn it.

There are many reinforcers that are inexpensive and require little time. Special privileges, such as being first in line, free time on a computer, or running an office errand, are common. Also, notice what activities students like to do during their free time. These can be powerful reinforcers and should be built into your reinforcement system.

Reinforcers . . .
Inexpensive
Little Time
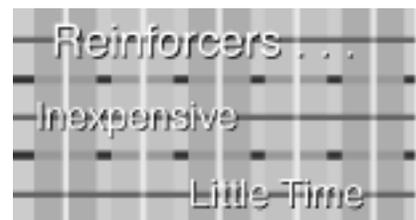
Set Token Values

Decide on the number of tokens that can be earned for exhibiting the target behaviors. Different amounts of tokens can be awarded for different levels of behavior. For example, Mrs. Allen may decide that 1 point can be earned for students who come to class prepared with a calculator, while she awards 2 points each time a student is in their seat with materials ready when the bell rings.

Behavior	Amount
In seat	1
Raise hand	1
On time	1
Negotiate	2
Accept Criticism	3

Set Reinforcer Cost

Determine the cost of each backup reinforcer. Strike a good match between the price of the reinforcer and the behavior required to earn it. Start with a low price for small amounts of behavior. Ultimately, as with all economies, demand can determine the cost of the reinforcers. Some teachers may initially equate the actual cost of an item with the tokens: Five tokens for 1 cent of value is often reasonable for a student who can earn an average of 50 tokens a day (e.g., a 25 cent toy could cost 125 tokens).

Reinforcer	Amount
5 min. free time	20 pennies
Time w/friend	30 pennies

Charging the right price is important. If costs are too low, students will quickly accumulate many reinforcers, thereby losing motivation to perform appropriately over time. But if prices are too high, students will give up, so allow for a few reinforcers to be earned quickly while requiring students to save up for the popular or more preferred items.

Construct a Bank

Some type of record-keeping system will be needed to keep track of tokens earned and spent. A "classroom bank" may consist of a large laminated list of students' names on which the teacher can write with a washable marker and erase as token totals change for each student. Publicly posting the bank accounts provides important feedback to students about how well they are doing and may foster positive competition among class members.

NAMES	POINTS
Ian	53
Flora	169
Jamie	37
Kathleen	74
Fiona	108
Gordon	215
Elizabeth	92

To protect your bank records, post the bank in a highly visible location and always keep a backup copy handy.

Arrange Business Hours for Exchange

Decide when tokens will be exchanged for backup reinforcers. Will it occur daily or weekly; at the end of the day, or before lunch or both; or as soon as possible as sufficient tokens are earned? Take care to follow through with the exchange plan. Consistency is critical! Students will anticipate the chance to exchange their tokens for reinforcers.

☑ Implement the program.

Explain the Program

First, explain how the token program works. Identify specifically when and where it will be in effect. Some token economies run all day, while others take place during certain class periods. Remember to post the rules for earning and exchanging tokens and the specific behaviors for which tokens can be earned. This may require careful discussion and roleplaying to demonstrate the details of the program.

Classroom Rules
1. Follow
2. Keep e
3. Keep fe
4. Use pe
5. Bring

What If? Chart
I Do . . .   I Don't . . .
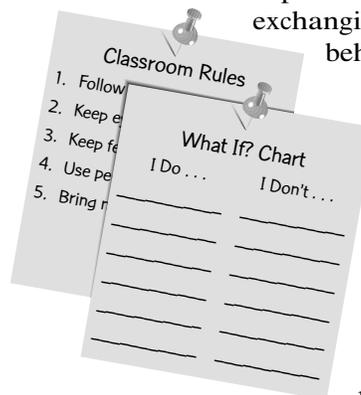
It's a good idea to let parents know that you're using a token economy. Be prepared to answer questions that parents might have.

Award Tokens With Praise

When implementing a token economy, praise should *always* accompany the dispensing of tokens. The praise should be informative; that is, specifically describe the behavior that resulted in the earning of a token. Both the token and the praise should be delivered quickly and unobtrusively to cause as little interruption as possible.

Diminish Tokens but Maintain Praise

For new behaviors, tokens should be delivered on a continuous basis (i.e., after each occurrence of the behavior). As students acquire the skills, gradually fade the use of tokens from a continuous to an intermittent schedule of delivery (e.g., "1 token:1 behavior" is reduced to "1 token:4 behaviors"), but while fading the number of tokens, continue praising students when they display correct behaviors.

Make Needed Adjustments

To maintain students' interest and motivation, adjust prices for backup reinforcers to reflect consumer demand and target behavior difficulty. Asking for difficult behavior changes with too few tokens as a reward is as problematic as rewarding numerous tokens for simple behavior. Finding the balance will maintain student interest and motivation and will lessen the likelihood of "token hoarding" (see cautions). Also, the teacher should change the backup reinforcers regularly to reflect those things for which students want to work hard.

Examples

Example 1

In Mrs. Yahoo's class, students earn 1 point on their point card each time a beep sounds on the beeper tape if they are following classroom rules and doing what they are supposed to be doing. At the end of the day, students may spend their points in the class store for snacks, small toys, and school supplies.

Example 2

A poker chip is placed in Alice's cup each time she is able to verbally label an object in her daily language session. At the end of the session, she is allowed to exchange each chip for 1 minute of play time with a toy she selected from a reinforcement menu.

Variations of the Technique

✍ **Permit peers to share the backup reinforcers.**
Allowing peers to share earned backup reinforcers, such as selecting a game to play with a friend, may help improve students' motivation to earn reinforcers.

✍ **Use a peer management system.**
Using peers to help dispense tokens, exchange backup reinforcers, and deduct tokens can improve students' motivation to participate and earn tokens. The privilege to help operate the token economy can be used as a reinforcer that students may buy.

✍ **Combine a token system with a classroom level system.**
A level system is a multistep management system in which each step signifies a number of target behaviors that a student must master. A token economy can be used with a level system to enable students to gradually master simple behaviors first, more difficult behaviors next, and finally the most complex behaviors. When a student has mastered all of the level system steps, he/she is faded from use of the level system and the token economy.

✍ **Combine a token economy with a group contingency.**
With a token economy/group contingency, the entire group's performance determines whether each individual in that group will earn a token (see *Group Contingency*—Level 1, LRBI). Individual program plans rather than group token systems must be used for management of problem behaviors.

✍ **Combine response cost with the use of token economy.**
Response cost may be employed to take away a predetermined number of tokens for previously defined inappropriate behaviors (see *Response Cost*—Level 2, LRBI).

✍ **Exchanging tokens.**
Exchanging tokens for backup reinforcers at a classroom store, establishing bank accounts complete with token checks and token auctions add to the fun of participating in a token economy.

Level System Across Behaviors

- Classroom
- Social
- Academic

5 General Ed.
4
3
2
Self-Contained 1

privileges
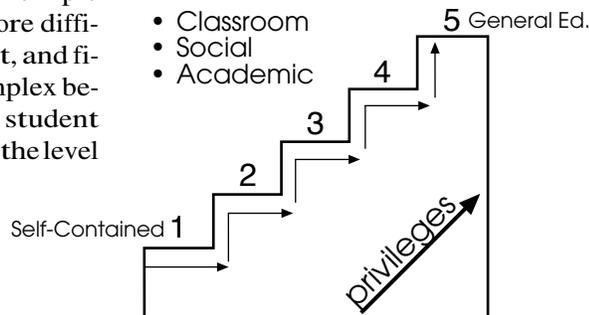
Potential Problems and Solutions

Token Economies Are Complex Systems

There are many advantages in using token economies. They allow for unobtrusive, continuous feedback to students, differential valuing of behavior, and experiences in delayed gratification as students wait for token exchange time. However, token economies take more time and effort to use than some other techniques. Always consider simpler interventions where they may be effective.

Unequal Pricing of Backup Reinforcers

Pricing backup reinforcers too low will enable students to earn many reinforcers in a short period of time, reducing motivation to perform appropriately over a longer period of time. Likewise, pricing backup reinforcers too high can result in students "giving up," believing it is too difficult the specific behaviors for which tokens can be earned should be posted in the classroom and clearly understood by the students before implementing a token economy. This may require careful discussion and roleplaying to demonstrate the details of the program.

Misuse of Tokens

With younger of severely disabled students, do not use tokens which may be swallowed or lodged in a nose or an ear. Also, select tokens which may not be easily counterfeited or stolen by students.

Token Hoarding

Students who are permitted to accumulate large hoards of tokens may believe that they can "coast" for a period of time and not work or behave appropriately until they run out of tokens. Hoarding may also result in a student's being able to purchase a large number of prized reinforcers in one day. Hoarding may be reduced by placing expiration dates on tokens or in having a backup reinforcer sale or auction. Rules for an auction can be that (a) *all* token savings are dropped to zero the day after the auction, (b) students bid against each other for the available items, and (c) students cannot lend each other points for the auction.

Behavior Deteriorates After Fading

✍ A loss of appropriate behavior after fading may be due to too large of a jump in the reinforcement schedule. For example, the teacher may have gone from giving tokens on a continuous schedule for hand raising to tokens on an intermittent schedule for an average of every 10th hand raised. The teacher should go back to a very brief period of continuous reinforcement and then try a smaller ratio, such as an average of every two or three hand raises. Fading students off the token economy should proceed slowly with lots of recognition given for students' independence.

✍ If a teacher neglects to pair praise with the delivery of each token, appropriate behavior will likely deteriorate as the token economy is faded. In this case, when tokens are faded, nothing is in place to maintain the newly acquired behavior. The teacher will need to return to the previous level and begin delivery of tokens with praise before attempting fading again.

✍ Behavior deterioration may also be due to too great a delay in awarding tokens after appropriate behavior has occurred or in too great a delay in exchanging tokens for backup reinforcers. Tokens should be awarded *immediately* after the appropriate behavior. Opportunities to exchange tokens may need to be more frequent at the beginning of the program to be effective.

Neglecting Legal Rights

All students have rights to water, food, clothes, and the bathroom. These cannot be used as backup reinforcers to exchange for tokens.

Getting Ready

✍ **Choose the tokens.**
Like cash, tokens are simply symbolic representations exchangeable for something of value to the student. As such, common forms of tokens are concrete items collected in a container, such as buttons, marbles, play money, and paper clips, as well as more symbolic tokens, such as lines or stars on a chart, points, happy faces, stamps, and holes punched in a card. Tokens should be portable, easy to dispense with a minimum of interruptions, and not easily counterfeited.

✍ **Select backup reinforcers.**
The most difficult aspect of token economies is selecting backup reinforcers for the token exchange. Activities, privileges, objects, and edibles make a useful assortment. Ask the students what they would like to earn, observe how students spend their free time, and administer reinforcer checklists to assist in developing backup reinforcers.

✍ **Inform parents and supervisors.**
Tell parents and supervisors of the intent to use the token economy. Describe the system to them and address their questions or concerns.

Materials and Supplies

✍ Actual tokens or materials to create tokens (e.g., marking pen or hole puncher and point card).

✍ A supply of backup reinforcers (e.g., free time, snack foods, stickers, etc.).

✍ A "classroom bank" chart or other means of tracking points earned and spent.

References

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