PSYCHOLOGY OF CLASSROOM LEARNING: AN ENCYCLOPEDIA

Rewards

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Every teacher in every classroom throughout the country uses strategies to acknowledge and encourage appropriate social and academic behavior by their students. These strategies take many forms, some overt and dramatic (presentation of tokens, or recognition at an assembly), others more subtle and embedded in natural activities (a smile, the organization of a successful academic effort). Our understanding of this process of encouraging appropriate behavior, and how best to incorporate this process in education, has been a major focus of both research and recent professional controversy. As a result, understanding the role and function of *rewards* is now a central concern for any educator.

Since 1898, when E. L. Thorndike described the "law of effect," educators and psychologists have noted that when a behavior is successful it is more likely to occur again in similar circumstances. The "success" of a behavior lies in the result, effect or consequence that behavior has on the environment. The simple message is that the consequences of a behavior affect future performance of that behavior. If, following the contingent delivery of a consequence, a behavior becomes more likely in the future, then that consequence was reinforcing or rewarding. This basic idea has been among the most intensely studied and validated phenomena associated with human behavior. The use of rewards in education remains a controversy, not over the principles governing its function, but in part due to two issues: (a) the precise definition of rewards, and (b) the perceived effect of rewards on "intrinsic motivation."

Defining rewards

Rewards (or the more accurate term: reinforcers) are technically defined as any contingently delivered consequence (e.g. event, activity, object) associated with an increase in the future likelihood of a behavior in similar situations. This definition has many problems when used in natural contexts like homes, schools and communities. When applied in a rigorous and precise manner, the definition allows an object or event to be classified as a reward, or reinforcer, only after demonstration that (a) the object/event was delivered contingent upon the performance of a behavior, and (b) the behavior became more likely to occur under similar conditions in the future. In practice, teachers and parents seldom wait to see the effect of a consequence on future occurrences of the behavior. It is far more likely that a teacher will simply *presume* that she/he has

provided rewards when praise is delivered following "sharing," or points are assigned for correct problem completion, or access to preferred toys follows work completion.

Herein lies an important distinction. The technical definition of a reward (reinforcer) always adopts the perspective of the learner, not the intentions of the person delivering the reward. If the contingent delivery of a consequence resulted in increased likelihood of that behavior then the consequence was a reward. If the consequence was a piece of preferred fruit, and the behavior increased, then the fruit was a reward; if the consequence was a sticker, and the behavior increased, then the sticker was a reward; if the consequence was a reprimand (which included adult attention), and the behavior increased, then the reprimand was a reward. It is the *effect* of the consequence on future behavior that determines if that consequence is a reward (reinforcer). If a consequence does not lead to increased likelihood of the behavior, then it was not a reward, even if the person delivering the consequence had the best of intensions. If a teacher's praise for "on-task" working is followed by a reduction in level of being "on-task" then the teacher's praise was not a functional reward (reinforcer). If the delivery of tokens for sharing on the playground does not lead to increased sharing then the tokens were not a reward. From a technical perspective, rewards are defined by the effect they have on behavior, not on their intended desirability. In this way, we can never define an event, activity or object as a reward without connecting it to the behavior that was affected by contingent access to that event, activity or object. Practically, teachers will deliver feedback and consequences that they "presume" are rewards. Those teachers with technical knowledge, however, will always check the effect of that presumed reward on student behavior.

Understanding rewards is of special importance for teaching because while we want desirable behavior to be rewarded, we do not want undesirable behavior to be rewarded. A reprimand, for example, may not have been intended to be a reward, but may still function in that capacity. One of the more common findings in schools is that teachers inadvertently reward inappropriate child behavior by attending to talking out, or disruptive acts. Similarly being sent to the office may be rewarding if it involves escaping from aversive or difficult work. If a behavior is contingently followed by (a) obtaining a desirable event/activity/object or (b) avoiding an aversive event/activity/object then the behavior will become more likely to occur in similar situations in the future. Said differently, the behavior has been rewarded.

Rewards are important for both encouraging appropriate behavior and preventing the encouragement of inappropriate behavior. What the science of human behavior teaches, is that we should adopt the perspective of the learner, not the teacher, when planning how to select and deliver rewards. The following are some basic guidelines:

- 1. Reward "behavior" not people. When rewards are provided be clear about the specific behavior that led to the reward.
- 2. Include the learner in identification of possible rewards. Use consequences that are likely to be rewarding to the students.
- 3. Use small rewards frequently, rather than large rewards infrequently.

- 4. Embed rewards in the activity/behavior you want to encourage.
- 5. Ensure that rewards closely follow the behavior you want to encourage. Generally behavior is more likely to change when the reward is delivered quickly.
- 6. Use rewards that are natural to the context, appropriate to the developmental age of the learner and easy to administer.
- 7. Use many different kinds of rewards (objects, activities, privileges, attention, natural consequences) rather than relying on one strategy or pattern.
- 8. Use rewards more often than negative consequences. Students should experience at least five times the number of rewards as they do corrections or punishers.
- 9. Avoid delivering rewards (even inadvertently) for problem behaviors.

The Impact of Rewards on Intrinsic Motivation

Recently, there has been concern that the formal use of rewards in schools could result in children failing to develop intrinsic, or self-managed motivation. Reading should be a behavior that becomes more frequent because the content of what is read is rewarding, not because a token or play period will follow reading. Sharing on the playground should occur because a child experiences personal satisfaction from behaving well, not because the child receives candy if she shares. Similarly, concern exists that if a teacher provides a reward to Child A for excellent math work, it will be a negative, or punishing, experience for Child B who did not receive a reward, tried just as hard, but did not get as many problems correct. These concerns are based on research conducted in the 1970s (Deci, 1971; 1975; Lepper, Greene & Nesbett, 1973) and have led to strong recommendations against the formal use of praise and extrinsic rewards (e.g. tokens, food, activities, privileges) in schools (Deci, Koestner, & Ryan, 2001; Kohn, 1993; 1996). There is evidence that rewards can be used poorly. The primary errors involve (a) providing rewards without being clear about the behavior being rewarded, (b) inadvertently providing rewards for problem behavior, (c) providing large rewards and then suddenly (rather than gradually) withdrawing the rewards, and (d) providing rewards so infrequently that a child never builds the skill fluency needed to attain the natural benefit of a skill (e.g. does not learn to read fast enough or well enough to enjoy reading). These errors are worth considering and avoiding.

The concern that rewards damage the intrinsic motivation of students is less well supported by research. Most educators will agree that academic and social skills learned in schools should be maintained by natural consequence, not artificial rewards. Reading, math and play skills should not end when a teacher is no longer present to offer verbal praise, toys, or stickers. The rewards provided for the behavior of one student should not function as a punisher for all others. There is less agreement (and much less evidence) that the use of rewards in schools leads to these ill effects.

To address these concerns several scholars recently examined the full body of research literature and concluded that not only have schools successfully employed the use of external rewards for decades (Slavin, 1997), but that the use of rewards following appropriate behavior is directly related to both initial, and durable academic and social success. Rewards are an effective, important and functional part of any educational

context, and need not be detrimental to intrinsic motivation (Akin-Little, Eckert Lovett & Little, 2004; Cameron, Banko & Pierce, 2001; Reiss, 2005). Rewards are especially important for helping motivate a child to build early competence (fluency) with reading, math or social skills. Encouragement, guidance and reward of appropriate approximations of successful behavior are helpful for students to build the skills that can then be sustained by the natural consequences from reading well, joining games with peers, or playing a musical instrument. Rewards also are important for building a predictable, positive social culture in a school. Schools with clearly defined behavioral expectations, and formal strategies for acknowledging (rewarding) appropriate behavior, are perceived as safer, more effective learning environments. The delivery of rewards is one overt way that children learn that adults are serious about the social and academic goals they are teaching.

Understanding and using rewards is an essential skill for any educator. Selecting the right type, level and form of rewards to encourage student behavior is a competence developed over time, and is a hallmark of effective teaching.

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