

Using Classroom Behavior Interventions to Facilitate UDL Implementation

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Abstract

Novice as well as expert teachers transitioning to new instructional strategies, benefit from knowledge of pro-active behavior management protocols. "Mystery Student" is a randomized group contingency protocol aligned to the UDL framework. It offers much needed support to teachers as they implement Universal Design for Learning. As a result of new classroom techniques and tools, the "Mystery Student" protocol can alleviate fears related to changes in classroom management.

Keywords

Universal Design for Learning, Classroom Management, Behavior Change

INTRODUCTION

Universal Design for Learning (UDL) is an instructional framework supported by evidence-based research and theoretical peer-reviewed publications that relate to instructional best practices. While the framework has been introduced to undergraduate students and expert teachers alike, little distinction between the implementation needs of these two groups of educators has been made. Research surrounding the differences between novice and expert teachers has repeatedly found a significant discrepancy between the classroom management styles of each group (Emmer & Stough, 2001). Novice teachers require more support to implement pro-active management strategies than their more experienced counterparts (Borko & Livingston, 1989). Though expert teachers typically need less support than novice teachers with respect to classroom management, many of the strategies that they have relied upon for years are incompatible with UDL's focus on student choice, flexibility, and student autonomy (Emmer & Stough, 2001). Therefore, despite a desire to implement UDL by adopting new management strategies and instructional practices, experienced teachers may fear that these changes will have a negative impact on student/classroom behavior. Borko & Livingston (1989) assert that by asking teachers to make such significant changes, we run the risk of creating resentment among expert teachers made to feel like classroom novices.

In order to support both novice and expert teachers in their implementation of the UDL framework we must explore ways to support the development of classroom procedures and pro-active management strategies that are in keeping

with the recommended practices of the framework (CAST, 2014).

One such solution is to explicitly outline classroom management protocols that are compatible with the UDL framework. This would provide much needed support to novice teachers who may have no prior knowledge of pro-active behavior management skills as well as expert teachers who fear that implementing student-centered instructional methods will cause classroom disruptions. Without additional support, teachers who do not possess strong classroom management strategies, and teachers who have had to abandon established strategies, will struggle to implement UDL (Borko & Livingston, 1989).

Evidence has shown that the observed benefits of the UDL framework such as greater student autonomy, instructional flexibility, and increased ability to meet student needs, all contribute to positive behavior management (Emmer & Stough, 2001). When implemented with fidelity, the UDL framework should have a positive impact on classroom management. However, systematic classroom procedures and pro-active management strategies are also important for the maintenance of pro-social classroom environments (Emmer & Stough, 2001).

In searching for classroom level behavioral protocols consistent with the UDL framework, randomized dependent group contingency plans present an ideal fit. A randomized dependent group contingency protocol provides flexibility within multiple instructional settings, and can be tailored to fit a spectrum of academic and behavioral goals.

WHAT IS A DEPENDENT GROUP CONTINGENCY?

A dependent group contingency is an arrangement in which a single individual or a subset of the group must meet criteria for the entire group to receive reinforcement (Vidoni & Ward, 2006; Williamson, Campbell-Whatley, & Lo, 2009). This arrangement is sometimes referred to as the "hero procedure" because group access to the reinforcer rests on the performance of one or a few individuals.

Research

Research on dependent group contingencies has been limited, likely because dependent group contingencies are rated as the least acceptable type of group contingency arrangement by teachers and school psychologists when compared to independent and interdependent group contingencies (Elliot, Turco, Gresham, 1987; Turco & Elliot

1990). Some educators assert that it is unfair to deny students access to a reinforcer based on the performance of another student or group of students (Romeo, 1998). In addition, a number of potential negative side effects of dependent group contingencies have been noted. For example, inappropriate peer responses such as frustration (Skinner, Cashwell, & Dunn, 1996) coercion, threats, (Romeo, 1998), or purposeful sabotage may develop in dependent group contingencies (Elliot et al., 1987; Kelshaw-Levering, Sterling-Turner, Henry, & Skinner, 2000; Skinner et al., 1996).

To alleviate these potential drawbacks, many researchers and educators use randomized dependent group contingencies. This differs from the traditional dependent arrangement because the student or students that the contingency hinges on are unknown to the class; they are randomly selected. Previous research has shown that randomized dependent group contingencies are effective at reducing inappropriate verbal behavior (Jones, Boon, Fore, & Bender, 2008), increasing supportive fair play behavior (Vidoni & Ward, 2006), increasing positive verbal statements (Hansen and Lignugaris-Kraft, 2005), increasing on-task behavior (Heering & Wilder, 2006).

Practice

It is critical when implementing group contingencies that the criteria set forth by the teacher is achievable for all students. Group contingencies should be used to address motivational deficits, not skill deficits (Axelrod & Greer, 1994). Therefore, if some students lack the necessary skills to meet the expectation, criteria may have to be adjusted for those students, or supports may need to be put into place to ensure that all students have access to mastery of the expectation.

There are a number of practical advantages of using randomized dependent group contingencies in classrooms. First, all students are urged to modify their behavior because anyone could potentially be the target student (Williamson et al, 2009). In addition, inappropriate peer responses do not develop because the target students are not revealed (Kelshaw-Levering et al., 2000). Furthermore, it takes less time on the part of the teacher to implement when compared to an independent or interdependent group contingency (Williamson et al., 2009). Most importantly, peer cooperation may develop because all students are working toward a collective goal (Davis & Blankenship, 1996; Hamblin, Hathaway, & Wodarski, 1973; Kelshaw-Levering et al., 2000; Skinner et al., 1996).

RANDOMIZED GROUP CONTINGENCY AND THE UDL FRAMEWORK

Randomized group contingency plans (RGCP) were selected as a method for increasing on-task student behavior and decreasing disruptive student behaviors within the UDL classroom because they offer enough flexibility to fit within a variety of learning activity models, do not require authori-

tative teacher – student interactions, and fit within the UDL guidelines.

RGCPs specifically support the UDL Principle, “Provide Multiple Means of Engagement,” as they are a means for externally reinforcing motivation (Axelrod & Greer, 1994). If we are to adhere to the concepts of student variability, we must acknowledge that for some students, particularly those with a history of negative educational experiences, external reinforcement may be necessary in order to prepare them for the positive learning experiences a UDL informed classroom has to offer.

Research has demonstrated that RGCPs have the capacity to specifically target multiple checkpoints within the UDL framework (see Table 1) (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). Specifically, the use of a RGCP has the potential to “minimize threats and distractions,” “foster collaboration and community,” and “promote expectations and beliefs that optimize motivation” (CAST, 2014).

Table 4. Alignment between Randomized Group Contingency Plans and the UDL Framework

Benefits of Group Contingency Protocol as Related to the UDL Framework	
Minimize Threats and Distractions <i>(UDL Checkpoint 7.3)</i>	Reduces inappropriate verbal behavior (Jones, Boon, Fore, & Bender, 2008) Increases positive verbal interactions (Hansen & Lignugaris-Kraft, 2005)
Foster Collaboration and Community <i>(UDL Checkpoint 8.3)</i>	Increases peer social acceptance (Nevin, Johnson, & Johnson, 1982) Increases supportive fair play behavior (Vidoni & Ward, 2006)
Promote expectations and beliefs that optimize motivation <i>(UDL Checkpoint 9.1)</i>	Increases on-task behavior (Heering & Wilder, 2006)

“Mystery Student”

“Mystery Student” (see appendix) is a RGCP designed specifically for the support of primary and secondary teachers attempting to implement UDL. In keeping with the spirit of UDL, the protocol has a core structure with options for adaptation to different learning environments and lesson activity structures. The protocol was also designed to support teacher knowledge of behavior change research, by providing some background about the use of reinforcement to increase desirable behaviors.

The core structure of the protocol asks teachers to select a “mystery student” at random and share the explicit behavioral objective for the lesson or activity. Should the “mystery student” meet the criteria for reinforcement, he or she will be revealed to their classmates and permitted to select the reward for the class from two to three options, thus fulfilling the “hero procedure.” In order to avoid negative feedback from peers, “mystery students” who do not meet the contingency for reinforcement are not revealed. Instead, teachers are asked to say, “unfortunately our mystery student did not meet the goal, we will try again later.” For adaptation options see the appendix.

Moving Forward

While “Mystery Student” has been used as a support to both novice and experienced teachers in a variety of schools and across multiple grade levels with reported success, a more thorough investigation of its effects on student behavior and its impact on teacher fidelity of UDL implementation is needed. We invite other practitioners to try “Mystery Student” and provide feedback as to the strategy’s usefulness. Additionally, as there is a strong connection between teacher effectiveness and classroom management, we advise the UDL community to look closely at the issue of maintaining positive classroom behavior in the student-centered classroom environments UDL seeks to create.

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REFERENCES

- Axelrod, S. (1973). Comparison of individual and group contingencies in two special classes. *Behavior Therapy, 4*, 83-90. doi: 10.1016/S0005-7894(73)80076-0
- Borko, H., & Livingston, C. (1989). Cognition and Improvement: Differences in Mathematics Instruction by Expert and Novice Teachers. *American Educational Research Journal, 4*, 473-498.
- CAST. (2014, 12 20). *UDL Guidelines- Version 2.0*. Retrieved from National Center on Universal Design for Learning: <http://www.udlcenter.org/aboutudl/udlguidelines>
- Davis, P. K., & Blankenship, C. J. (1996). Group-oriented contingencies: Applications for community rehabilitation programs. *Vocational Evaluation and Work Adjustment Bulletin, 29*, 114-118.
- Elliott, S. N., Turco, T. L., & Gresham, F. M. (1987). Consumers' and clients pretreatment acceptability ratings of classroom group contingencies. *Journal of Schools Psychology, 25*, 145-153.
- Emmer, E. T., & Stough, L. M. (2001). Classroom Management: A Critical Part of Educational Psychology, With Implications for Teacher Education. *Educational Psychologist, 103*-112.
- Hamblin, R. L., Hathaway, C., & Wodarski, J. (1973). Group contingencies, peer tutoring, and academic achievement. *School Psychology Review, 2*, 36-41.
- Hansen, S. D. (2005). Effects of a dependent group contingency on the verbal interactions of middle school students with emotional disturbance. *Behavioral Disorders, 30*, 170-184.
- Heering, P. W., & Wilder, D. A. (2006). The use of dependent group contingencies to increase on-task behavior in two general education classrooms. *Education and Treatment of Children, 29*, 459-467.
- Jones, M., Boon, R. T., Fore III, C., & Bender, W. N. (2008). "Our mystery hero!" A group contingency intervention for reducing verbally disrespectful behaviors. *Learning Disabilities: A Multidisciplinary Journal, 15*, 61-69.
- Kelshaw-Levering, K., Sterling-Turner, H. E., Henry, J. R., & Skinner, C. H. (2000). Randomized interdependent group contingencies: Group reinforcement with a twist. *Psychology in the Schools, 37*, 523-533.
- Romeo, F. F. (1998). The negative effects of using a group contingency system. *Journal of Instructional Psychology, 25*, 130-133.
- Skinner, C. H., Cashwell, C. S., & Dunn, M. S. (1996). Independent and interdependent group contingencies: Smoothing the rough waters. *Special Services in the Schools, 12*, 61-78.
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based Practices in Classroom Management: Considerations for Research to Practice. *Education and Treatment of Children, 35*, 351-380.
- Turco, T. L., & Elliot, S. N. (1990). Acceptability and effectiveness of group contingencies for improving spelling achievement. *Journal of School Psychology, 28*, 27-37.
- Vidoni, C., & Ward, P. (2009). Effects of fair play instruction on student social skills during a middle school sport education unit. *Physical Education and Sport Pedagogy, 14*, 285-310.
- Williamson, B. D., Campbell-Whatley, G. D., & Lo, Y. Y. (2009). Using a random dependent group contingency to increase on-task behaviors of high school students with high incidence disabilities. *Psychology in the Schools, 46*, 1074-1083.

APPENDIX: “Mystery Student” Protocol

Mystery Student

A Randomized Group Contingency Behavior Plan for Increasing Time on Task and Work Production During Independent or Group Activity Time.

Background:

When first establishing a new behavior protocol, it is important to allow students to access the *reinforcement* and thus buy in to the behavior protocol. Increases in expectations should be very gradual and incremental so as not to discourage participation in the behavior modification plan.

It is important to remember that a reinforcer is anything that increases the frequency of a behavior. *All Children do not find the same items/privileges reinforcing.* If an item or privilege is not increasing behavior, then it is not a reinforcer.

A *dependent group contingency* is a behavior protocol that requires a single member or small group within the larger group to exhibit the desired behavior in order for the whole group to access the reinforcer. The “Mystery Student” in this scenario will be selected at random on a daily basis and the class reinforcement will be contingent upon the Mystery student’s behavior.

This protocol was developed to meet the needs of a variety of learning environments and classroom activities; therefore we have provided a core protocol as well as options to enable customization to meet classroom needs.

Core Protocol:

1. Randomly select an anonymous student at the start of your activity. (Sticks labeled with student names or a random name generator work equally well.) **Do not reveal this student;** he/she will serve as the Mystery Student for that work period.
2. Set *criterion for reinforcement.* This means that you set observable, measurable behavioral goals for the class to achieve during independent work time.
3. Once criteria have been established, and the Mystery Student selected, the students will be asked to start working. The delivery of reinforcement is dependent solely on the Mystery Student’s behavior/performance. However, ***no one, including the Mystery student, knows who that student is.*** Keeping the Mystery Student’s identity a secret during the work period is critical!
4. At the conclusion of the work period the teacher announces if the Mystery Student met the behavioral objectives. If the objectives *were* met, the Mystery Student’s identity will be announced. Classmates are encouraged to thank and congratulate the Mystery Student for doing a good job. The Mystery Student may then select a reinforcer for the class (a menu of items is suggested) If the goals *were not* met, the teacher **does not** reveal the Mystery Student and classroom activities move on. Teachers may say something such as, “unfortunately, today’s Mystery Student did not meet our behavior and work goals, so there will be no reward today. Everyone will try again tomorrow.” It is critical to never reveal the Mystery Student’s identity if the student did not meet criterion as this could potentially lead to negative peer interactions.

** When first using this protocol, it is advisable to pretend to select a student at random, to increase the likelihood that students will obtain the reinforcer so that they understand the contingency. If possible, select a student who met the criteria but is not typically regarded as an on-task student. This will increase buy-in from the class*

Options for Customization:

To Reinforce Collaborative Group Work:	To Reinforce Individual Behavior During Group Work:	To Support Independent Work Completion:	When Differentiated Criteria Is Necessary:
<p>Rather than selecting an individual “mystery student” you will select a “mystery group.”</p> <p>Create a name or number for each group. Select one group at random to be the “mystery group.”</p> <p>The criteria for reinforcement should be focused on the behavioral expectations of collaborative efforts of the group members as a whole.</p> <p>Students can self-monitor their collaboration and place a group rating on their table/work space for the teacher to silently observe while determining if a group met criteria.</p>	<p>You will still select one “mystery student.” This student will be held accountable for their actions within their group.</p> <p>When setting your behavioral expectation for accessing the reinforcement, use the acronym GROUPS:</p> <p>Give thoughtful feedback Respect Others On-Task Behavior Use soft voices Participate Stay with the group</p> <p>Students may need more specific examples of each piece of the acronym the first time you use it.</p>	<p>Create a “Secret Mission File Folder” for each student in the class.</p> <p>Within the file folder, create a task list of items to complete.</p> <p>This list may include options, such as a choice board, or menu activity.</p> <p>Students will check-off the requirements as they complete them.</p> <p>The teacher will monitor the completion of each student’s “secret mission” so as not to accidentally reveal the identity of the mystery student.</p>	<p>Create a “Secret Mission File Folder” for each student in the class.</p> <p>Create groupings for your students.</p> <p>Using your groupings, create separate “missions” for each set of students to complete in order to meet criterion.</p> <p>Students will not know if their missions are different from each other.</p> <p>If the mystery student meets his or her secret mission, they may access the reinforcer for the whole class.</p>