

## **Actively Caring to Prevent Bullying in an Elementary School: Prompting and rewarding prosocial behavior**

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*Undergraduate research assistants (RA) delivered an Actively Caring for People (AC4P) curriculum to increase prosocial behaviors, using lesson plans, contingencies, behavior-based feedback and goal setting. The RAs taught weekly lessons to develop behavioral skills: a) performing prosocial behavior, b) expressing gratitude, and c) recognizing peers for prosocial actions. Students were told: If you observe prosocial behavior of a classmate and document it on a notecard, you might be selected to receive an AC4P wristband to wear for the week. Plus, a group contingency was stated: If everyone wears the wristband once, everyone gets a wristband to keep at the conclusion of the lessons.*

*Sixth and seventh-grade students completed surveys as part of the Intervention group (n=292) and Control group (n=278). These students self-reported their prosocial behaviors as well as perpetration and victimization of aggression and bullying. The attached graph shows a 50% reduction in reported victimization for one intervention school (i.e., C). Further analysis of the data will be discussed, as well as follow-up research.*

**KEYWORDS:** interpersonal bullying, AC4P intervention,

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Bullying is intentional aggressive behavior that involves an imbalance of power, and occurs repeatedly over time (Olweus, 1993). It includes name calling, verbal or written abuse, exclusion from social situations, physical abuse, and coercion. As much as 74% of students have observed teasing and bullying at their elementary schools (Kaiser Family Foundation & Nickelodeon, 2001). Victimization from bullying has been linked specifically to a variety of negative outcomes, including poor academic achievement (Glew, Fan, Katon, Rivara, & Kernic, 2005), anxiety (Salmon, James, & Smith, 1998), depression (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007), suicidal ideation (Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999), and suicide attempts and completions (Klomek et al., 2009).

### **Intervening to Prevent Bullying**

Colvin, Tobin, Beard, Hagan, and Sprague (1998) provide specific criteria for educators selecting a bullying-prevention program. They advise the intervention should be: a) supported by research, b) based on behavioral principles, and c) emphasize the teaching of prosocial behavior to replace bullying behavior. In addition, Whitted and Dupper (2005) emphasize a successful bullying-prevention intervention should include: a) a school-level approach to change school culture, b) tangible and social rewards, c) clear behavioral expectations, and d) social-competence building.

Although U.S. schools have implemented a variety of anti-bullying programs (Vreeman & Carroll, 2007), the efficacy of most have been disappointingly limited (Merrell, Gueldner, Ross, & Isava, 2008; Swearer et al., 2010). This is partly because the interventions typically focus on bullies and victims rather than attempting to improve the school culture (Atlas & Pepler, 1998; Garrity et al., 1997).

## **The Disciplinary Approach**

A meta-analysis of 44 programs designed to prevent bullying in schools identified the critical program elements as classroom rules, teacher training, and classroom management (Ttofi & Farrington, 2010). School psychologists reported the following three most frequently used intervention strategies as: 1) discussions between school personnel and bullies after bullying incidents, 2) disciplinary consequences (e.g., suspension) for bullying, and 3) heightened supervision in less structured places like the playground (Sherer & Nickerson, 2010). Unfortunately, this approach to reducing interpersonal bullying has a poor history of effectiveness, especially over the long term (Swearer, Espelage, Vaillancourt, & Hymel, 2010).

## **Positive Behavior Interventions and Support**

Positive behavior interventions and support (PBIS) integrates principles from applied behavior analysis and humanism in order to increase inclusion and the frequency of desired behavior, and reduce the occurrence of problem behaviors school-wide (Carr et al., 2002). The PBIS whole-school approach involves the following elements: a) defines desirable outcomes (e.g., academic performance, social competence) valued by key stakeholders (e.g., students, families, school personnel), b) behavioral-science and biomedical-science principles to achieve these outcomes in educational contexts, c) integrates the validated practices into the existing system for sustainable and generalized effects (Sugai & Horner, 2002). Many school psychologists have suggested a school-wide PBIS plan as the most effective anti-bullying strategy (Sherer & Nickerson, 2010). Although PBIS uses teachers and administrators to support positive behavior initiatives, a student-to-student component is notably lacking.

**Actively Caring for People (AC4P).** Geller (1991) coined the term “actively caring” for any behavior that goes above and beyond the call of duty on behalf of the health, safety, or

welfare of another person. The AC4P approach to improve human welfare is founded on principles from humanism and applied behavioral science (Geller, 2014). The behavior-based framework of AC4P focuses on: a) improving observable behavior, b) using activators to direct behavior, and c) applying positive consequences to motivate behavior (Geller, 1996, 2001).

In addition, AC4P interventions apply: a) supportive feedback and recognition to reward AC4P behavior and increase perceived competence to fuel self-motivation (Deci, 1975; Ryan & Deci, 2000), b) perceived empowerment to enhance self-determinism (Bandura, 1997), and c) self-efficacy, personal control, belongingness, optimism, and self-esteem to facilitate one's propensity to perform AC4P behavior (Geller, 2001, 2014).

### **An Integrated Approach**

Students who bully seek power and coercive dominance and are often recognized for their aggressive behavior with tangible or social rewards (Olweus, 2012). Given the responsiveness of these students to rewards, it seems an anti-bullying intervention should include an incentive/reward contingency that promotes behavior contrary to bullying. In other words, a widely-practiced and effective way to eliminate an undesirable behavior (e.g., bullying) is to reward desirable behavior (e.g., AC4P behavior) incompatible with the undesirable behavior (e.g., Miltenberger, 1997; Ogier & Hornby, 1996).

The bully-prevention intervention evaluated in this research was consistent with the PBIS and the actively-caring intervention approaches, and was introduced as an "Actively Caring for People" (AC4P) program. This AC4P intervention involved communicating, modeling and rewarding desired AC4P behavior. In particular, the intervention process applied tangible and social reinforcement to promote prosocial behaviors incompatible with bullying, and thus aligned with the program guidelines recommended by Whitted and Dupper (2005) and Carr et al. (2002).

## **Correlates of Bullying**

Bullying has many correlates, including: a) individual factors, such as age (Scheithauer, Hayer, Petermann, & Jugert, 2006) and gender (Underwood & Rosen, 2011), b) relational factors, such as social support from peers (Demaray & Malecki, 2006) and teachers (Flaspohler, Elfstrom, Vanderzee, Sink, & Birchmeier, 2009), and c) the classroom climate (Doll, Song, Champion, & Jones, 2011).

Self-esteem, or individuals' perception of their self-worth, is an individual-difference factor affecting the impact of bullying. Specifically, children's scores on the Rosenberg Self-Esteem scale correlated negatively with victimization due to bullying (Rosenberg, 1965). Despite role distinctions between bullies and victims, both experience a sense of low self-worth or self-esteem (O'Moore & Hillery, 1991). Therefore, O'Moore and Kirkham (2001) recommend increasing students' perceptions of self-esteem as a bullying-reduction technique.

When proposing certain dispositions increase one's propensity to exhibit AC4P behavior, Geller (1996, 2001) considered self-esteem to be a critical person-state or "establishing operation" (Michael, 1982). Indeed, relevant research has shown positive correlations between self-esteem and prosocial behavior (Batson, Bolen, Cross & Neuringer Benefiel, 1986; Bierhoff, Klein, & Kramp, 1991; Wilson, 1976). Moreover, those scoring relatively high on measures of self-esteem were more likely to actively care in both reactive (Michelini, Wilson, & Messe, 1975) and proactive (Geller, Roberts, & Gilmore, 1996) situations.

Thus, this research included an estimate of self-esteem, while expanding a previous bully-prevention intervention study (McCarty & Geller, 2011).

## **Method**

### **Participants and Setting**

The 404 participants were second (n= 107), third (n=100), fourth (n=54), fifth (n=89), and sixth-grade (n=54) students from 16 classrooms at an elementary school in Northeast Virginia. The school requested the AC4P program after hearing about its success at a nearby elementary school (i.e., the site for McCarty & Geller, 2011).

The ethnic diversity of the school was: 77% White, 1% African American, 4% Hispanic, and 18% Asian (Virginia Department of Education, 2011a). The socio-economic status (SES) of students from this school, as measured by the percentage of students eligible for free or reduced-cost lunches was 0.9% for pre-kindergarten through sixth-grade students (Virginia Department of Education, 2011b).

### **Intervention**

The intervention program established an “if-then” contingency to increase occurrences of prosocial or AC4P behavior among students. To be eligible to wear a green wristband embossed with the message, “Actively Caring for People” students had to write a report of a specific AC4P behavior they observed, or perform an AC4P behavior themselves and have it documented in the report of another student.

At the start of each day, the classroom teacher selected three AC4P reports to read aloud to the class, publically recognizing the relevant students. From these three reports, one was selected and the pair of students involved – the good-deed performer and the observer – were each given a green AC4P wristband to wear for the day, as the “Actively-Caring Heroes of the Day”. This cycle of sharing AC4P stories and recognizing certain AC4P observers and performers was repeated each day for five consecutive weeks. The teacher’s selection of reports

to read each day and the one to use for the wristband reward was not random. To increase the likelihood the class would meet the team goal of every student participating at least once as both an observer and a performer, teachers to read reports from students who rarely submit them.

Each week from Weeks 2 to 6, the teacher facilitated relationship-building and belongingness among classmates by randomly pairing students for interpersonal discussions. At these weekly sessions, students discussed one of the following statements or questions: a) What do you want to be when you grow up?; b) Share a secret talent you have or something you do really well; c) What is your greatest fear, and why?; d) What do you like most about school, and why?; and e) Share something new about yourself. The purpose: to foster new relationships among students and make interpersonal AC4P behavior easier to perform and observe throughout the five-week intervention phase.

After Baseline assessments (for one week), every teacher participated in a one-hour training workshop. The senior author explained the background of the AC4P Movement, the evidence-based principles underlying the AC4P approach, and the prominent success of the intervention at a nearby elementary school (McCarty & Geller, 2011). Teachers were handed a guidelines sheet with specific instructions to follow throughout the intervention phrase.

Subsequently, the senior author gave a 45-minute presentation of the AC4P Movement at two separate assemblies (i.e., grades K-3 and 4-6). Students were provided the definition of AC4P and shown the AC4P wristband. Then they engaged in a “caring chat” by turning to a partner and sharing a time when a classmate helped him/her. Afterwards, the AC4P program was explained in detail, including the individual and group “if-then” contingencies rewarded with an AC4P wristband.

Teachers, administrators, and supporting staff recognized and rewarded the AC4P behavior of colleagues and/or co-workers with an adult-size AC4P wristband, often in the presence of other students. They were instructed to follow the SAPS process by: a) observing the AC4P behavior of an adult in the school building (i.e., See), thanking the person for actively caring (i.e., Act), passing on the AC4P wristband to another colleague they observe performing AC4P behavior (i.e., Pass), and sharing the story from the AC4P wristband exchange with their students (i.e., Share). Thus, it was common to see an AC4P wristband worn by teachers and support staff.

## **Evaluation**

An AB time-series design was implemented, consisting of a Baseline phase during Week 1 and an Intervention phase during Weeks 2 to 6. Every Friday students completed a survey that assessed the frequency of bullying behaviors they performed, observed, and received from others. Additionally, the students responded to a single-item estimate of self-esteem. They completed the surveys anonymously and were informed of their choice to answer all, some, or none of the questions. Informed consent was implied by the return of a survey. This survey used a 10-point response scale (i.e., 0 to 10+) to assess bullying frequency and a 5-point Likert scale (i.e., Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) to estimate self-esteem.

## **Dependent Variables**

***Demographics.*** On each weekly survey, students completed demographic questions targeting grade, gender, and teacher.

***Bullying behaviors.*** After reading this definition of bullying printed on the survey: “Bullying is when someone hurts another person on purpose and more than once the students answered the following questions by giving a number from 0 to 10+: 1) In the past week, how



many times have you seen someone else bullied?; 2) In the past week, how many times have you bullied someone else?; 3) In the past week, how many times have you been bullied by someone else?

***Estimate of Self-Esteem.*** The survey included a single-item measure of self-esteem, “I feel good about myself,” from the ten-item Rosenberg Self-Esteem (RSE) scale (Rosenberg, 1965). To respond to this statement, students circled one of five alternatives: Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree. Although the psychometric properties of this face-valid item are unknown, the single-item self-esteem, “I have high self-esteem,” was highly correlated ( $r=.80$ ) with the RSE, suggesting one face-valid survey item could replace a validated-scale when survey length is limited (Robins, Hendin, & Trzesniewski, 2001).

## **Results**

### **Bullying Behavior**

The frequency of observed bullying behavior was averaged for each grade, resulting in a mean weekly score of bullying frequency per each grade. Figure 1 shows an overall decrease in the frequency of observed bullying behavior for each grade from Baseline to Week 6. The frequency of bullying behavior trends downward over weeks for four of the five Fridays with the exception of Grade 5, where bullying decreased markedly from Week 1 to 2, but increased slightly from Week 2 to 5 until a marked decrease from Weeks 5 to 6. From Baseline to Week 6 and across all grades, the frequencies of observed bullying behavior decreased by 50.4%, bullying others decreased by 53.8%, and victimization due to bullying decreased by 52.3%.

< Insert Figure 1 about here >

Figure 2 depicts the mean weekly reported frequency of being bullied (i.e., victimization), and shows a dramatic decrease from Baseline to Week 2, with a downward trend for the

subsequent intervention weeks, except for Grade 3. Indeed, the mean frequency for Week 6 was less than at Baseline for every grade level. Students experiencing at least one act of bullying per a given week were categorized as “victims.” The mean percentage decrease in “victims” from Baseline to Week 6 was: 43.7% for Grade 2, 38.7% for Grade 3, 6.5% for Grade 4, 65.5% for Grade 5, and 49.6% for Grade 6.

<Insert Figure 2 about here>

### **Self-Esteem**

As depicted in Figure 3, the mean scores for the self-esteem item increased rather consistently from Baseline to Week 6 for each Grade.

<Insert Figure 3 here>

### **Group Membership**

Students were categorized into groups related to bullying as: uninvolved in bullying, bully only, victim only, or bully victim. These categorizations were not performed by grade but rather for the aggregate of student behavior in the entire school. Table 1 depicts the change in group membership over the six weeks. The chi-square indicated significant differences between groups over the six weeks,  $\chi^2(15, 2256) = 71.0, p < .001$ . The percentage of students labeled “victims only” dropped from 31.5% of the total sample at Baseline to 18.5% at Week 6. Additionally, Bullies only represented 1.5% at baseline and .9% at Week 6. Bully-Victims represented 8% of the sample at Baseline and Only 3.4% at Week 6. Finally, the students uninvolved in bullying rose from 59% (Baseline) to 77.3% at Week 6.

<Insert Table 1>

## **Discussion**

At Baseline, observed bullying behavior was highest for Grade 3 and lowest for Grade 6. Similarly, victimization was highest at Baseline for Grade 3 and lowest for Grade 6. While Espelage and Holt (2001) found students bully more as grade level increases, other researchers found the opposite (Ma, 2002; Olweus, 1993). Our results support the prior research of Ma (2002) and Olweus (1993) that higher rates of observed bullying by peers occur in lower grade levels.

Many researchers and journalists appear to believe “if-then” contingencies are ineffective and harmful (Pink, 2009; Schwartz, 2010). In fact, Kohn (1993) states, “Incentives do not alter the attitudes that underlie our behaviors (p. 2)... further, not receiving a reward one had expected to receive is also indistinguishable from being punished” (p.3). This was not the case in the research reported here. In fact, for every grade the mean score of self-esteem increased throughout the Intervention phase.

Each week, a majority of students in the classroom did not receive the wristband reward, because a maximum of ten students could be recognized weekly. Yet marked increases in self-esteem occurred for each grade. Thus, a positive side-effect of the significant decline in bullying for all grades was a concomitant increase in a one-item estimate of self-esteem.

### **Social Validity**

While observed bullying is the most relevant evaluation metric for a school-wide intervention to decrease bullying, a measure of social validity is critical. As emphasized by Schwartz and Baer (1991), social validity refers to the acceptability or viability of an intervention program as assessed by its impact on relevant stakeholders. Although not directly measured, the social validity for the AC4P intervention appeared high. With regard to student

involvement, every student participated in the AC4P intervention, writing at least one AC4P reports and performing at least one AC4P behavior. All of the teachers at the school integrated the AC4P intervention into their daily morning routines. Additionally, administrators benefitted from the low financial cost of the program (i.e., \$405 for 404 student wristbands and one adult-size wristband).

At the conclusion of the AC4P intervention in Elementary School 2, the first author received a phone call from the Principal with a request to use the phrase “Actively Caring for People” on a colorful stained-glass window. The special stained glass window depicted in Figure 3 now hangs in the school cafeteria. The sixth-grade students had voted for this window as their class gift to the school. Thus, students' choice for an AC4P stained-glass window and their marked increase in self-esteem throughout the intervention suggests a prosocial incentive/reward intervention can be both effective and socially valid.

The principal reported to a news article, “I think it struck a chord with our students, and would at any school. Actively Caring for People has become part of our language, part of our school” (Raboteau, 2011). These reactions from the Principal and students reflect strong support for the social validity of this AC4P approach to prevent bullying.

< Insert Figure 4 here >

## **Limitations**

This field study has several obvious limitations, which could be overcome in follow-up research. First, without subject codes to track individual students, it was impossible to monitor change among individuals and conduct an analysis of variance (ANOVA). Thus, classroom means were necessarily used to assess intervention impact. Also, most Baseline-Intervention-Withdrawal (ABA) time-series designs involve several consecutive weeks of Baseline and stable

levels of the target behavior(s) before implementing an intervention. This study was severely limited by using a single week of both Baseline and Withdrawal.

While prior research suggests some validity in anonymous self-reports, survey responses by students alone do not provide objective evidence of the occurrence of specific behaviors and their context. In fact, Cornell and Brockenbrough (2004) found a weak relationship between self-reported and peer-reported nominations of bullies and victims. However, Jolliffe and Farrington (2006) suggest self-report questionnaires, self-report interviews, peer reports, and teacher reports produce relatively consistent bullying rates. Additionally, self-report scales are the most popular method for assessing interpersonal bullying in schools (Smith, 2004). The assessment of bullying, including the definition and specific questions about “bullying,” could be improved by adding indicators of specific aggressive behaviors and power imbalance (e.g., Felix, Sharkey, Green, Furlong, & Tanigawa, 2011).

There were no manipulation checks on the teachers’ behaviors. In other words, we have no objective assurance the teachers followed the daily protocol exactly as prescribed. We have only their verbal reports of adhering to our instructions. Although teachers were not instructed to change any of their reactions to bully-related behaviors (e.g., frequency of helping bullied children, frequency of disciplinary methods, or frequency of referrals for bullying), it’s plausible their helping behavior, disciplining, and referral writing changed as a result of their involvement in the AC4P process.

### **Future Research**

The AC4P approach will continuously improve, as well as methods to evaluate impact. Future program components will include: a) soliciting participation among stakeholders (e.g., parents, teachers) in the AC4P Movement by passing them wristbands and sharing stories, b)

incorporating a video-curriculum of AC4P stories and lessons from AC4P leaders in elementary, middle, high-school, and university settings, c) adding education and interaction exercises to teach relevant character strengths, and d) involving students and teachers from diverse educational settings nationwide.

By noticing, thanking, and rewarding the AC4P behavior of others with the AC4P wristband as a token of appreciation, a cycle of interdependent appreciation and compassion is supported in schools and throughout communities. To date, almost 100,000 AC4P wristbands have been purchased on the ac4p website, and more than 1,500 individuals have posted their delivery of an AC4P wristband for AC4P behavior at ac4p.org. Indeed, with AC4P leaders modeling AC4P behavior, recognizing the AC4P behavior of others, and sharing AC4P stories online and offline, an AC4P norm can be cultivated.

Follow-up research on the AC4P approach will occur in various elementary schools from Virginia to California. These schools will be located in rural, suburban, and urban areas. This field study is merely the first to demonstrate the potential of an AC4P approach to prevent interpersonal bullying that avoids punitive consequences and is clearly less costly than prior disciplinary methods, suggesting greater social validity.

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*Table 1. Cross-tabulation of assessment phase and student category*

<i>Condition</i> Membership	Assessment Phases					
	1	2	3	4	5	6
Uninvolved	236 (59%)	285 (74.4%)	277 (75.7%)	300 (80%)	296 (78.3%)	272 (77.3%)
Victim Only	126 (31.5%)	75 (19.6%)	73 (19.9%)	68 (18%)	69 (18.3%)	65 (18.5%)
Bully Only	6 (1.5%)	8 (2.1%)	4 (1.1%)	4 (1.1%)	2 (.5%)	3 (.9%)
Bully-Victim	32 (8%)	15 (3.9%)	12 (3.3%)	5 (1.3%)	11 (2.9%)	12 (3.4%)

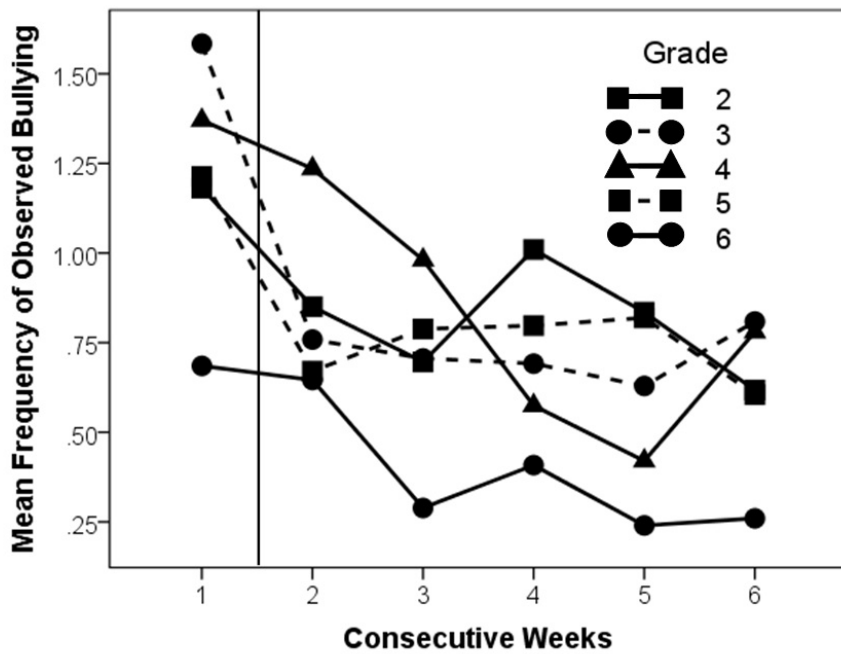


Figure 1: Mean frequency of observed bullying per grade over consecutive weeks.

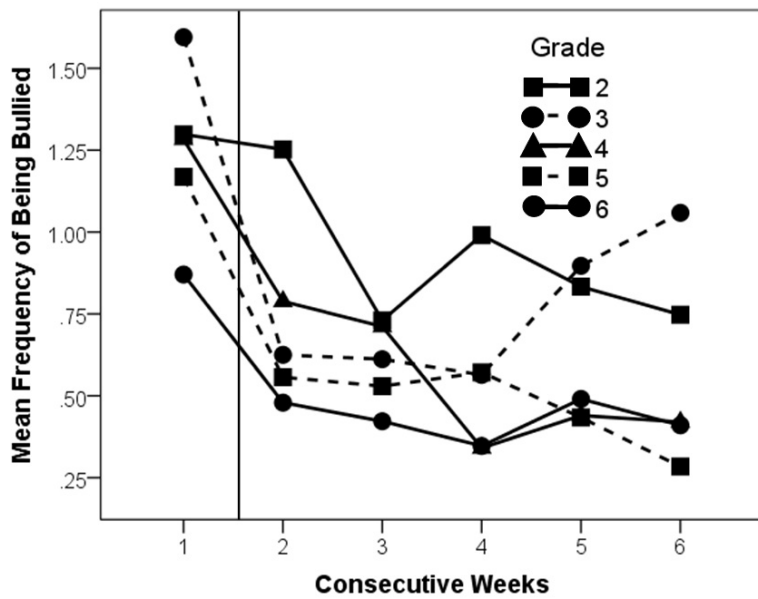


Figure 2: Mean frequency of being bullied per grade over consecutive weeks.

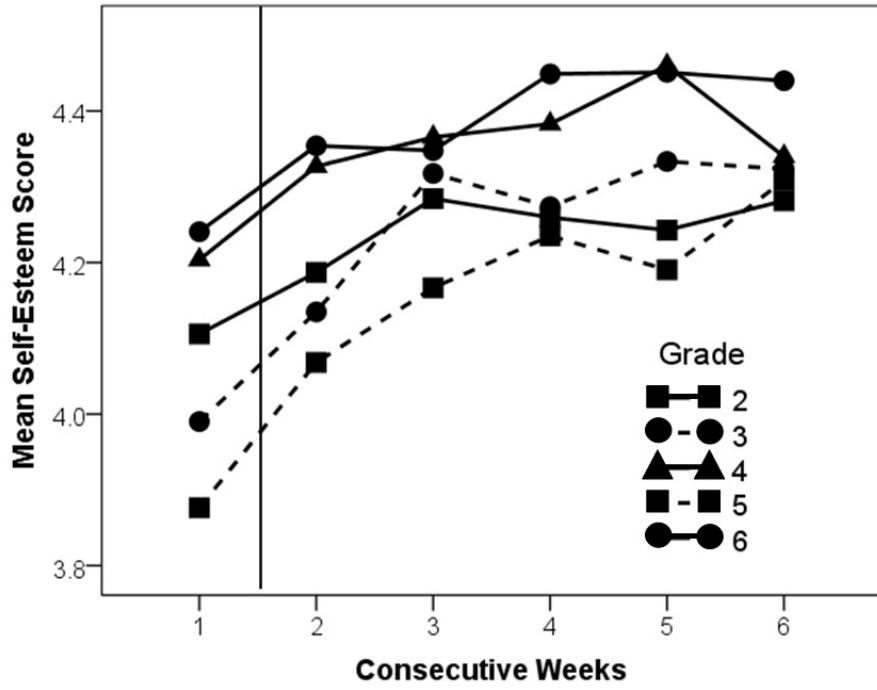


Figure 3: Mean self-esteem rating per grade over consecutive weeks.

Figure 4: The stained glass window gifted by the sixth-grade class.