

# A qualitative examination of critical feedback processes in project-based youth programs

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## ABSTRACT

When an adolescent receives critical feedback from adults on what they should change, they may feel discouraged; however, such feedback can be key to learning. This study explored how adolescents attending project-based youth programs experienced critical feedback from adult leaders and the strategies these leaders employed when providing feedback. Qualitative analyses of interviews with 49 youth and 24 leaders indicated that youth participants found critical feedback to be useful because leaders intentionally provided straightforward, clear, and balanced feedback in a manner that was empathetic and involved dialogue that privileged participants' ownership of their work. Using extant literature, we discuss why the features identified may be especially important during the period of adolescence.

## 1. Introduction

In project-based youth programs, adolescents learn skills by engaging with ongoing feedback from adult program staff as they work on projects. Receiving feedback on what to change in one's work can hurt, however, it can also be useful—enabling adolescents to improve their work (Hattie & Timperley, 2007; Kluger & DeNisi, 1996). Youth programs (including extracurricular school activities and community programs) are organized group activities outside of the regular school hours that are designed to promote positive development (Eccles & Gootman, 2002). In project-based programs, youth participants learn new skills by creating works of art, planning events, cultivating gardens, or other youth-driven projects (Heath, 1999).

In this paper we are concerned with how program staff in these youth-driven activities provide critical feedback, which we define as information given to youth participants on how their work can be improved (see the literature review for a fuller conceptualization). Providing critical feedback may be challenging in youth-driven activities because adults need to be skillful at providing critical feedback in ways that also support a foundational belief that adolescents retain control over their work (Larson, Izenstark, Rodriguez, & Perry, 2016; Smith, McGovern, Larson, Hillaker, & Peck, 2016; Walker, Marczak, Blyth, & Borden, 2005). Feedback processes in project-based programs are vital to learning, yet the ways in which the adult program leaders

(the staff) provide useful critical feedback has been unexplored. Our aim was to identify how leaders provide useful critical feedback within project-based programs serving adolescents. Because the process of receiving and providing feedback is relational, we obtained the perspectives of both the receivers (youth participants) and the providers (adult program leaders) of feedback. Better understanding the intentions of those providing feedback and the way those receiving that feedback feel about it can provide insight on how effective feedback processes unfold. Thus, we conducted qualitative interviews to understand how both providers and receivers constructed their experiences with feedback.

### 1.1. Critical feedback processes

Feedback has been defined as “information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding” (Hattie & Timperley, 2007, p. 81) and “all dialogue to support learning in both formal and informal situations” (Askew & Lodge, 2000, p.1). This study focuses on the process of providing *critical feedback*. We define critical feedback as interactions aimed at redirecting and improving the receivers' work. Being critical of someone's work entails “expressing or involving an analysis of [its] merits and faults” (Lindberg, 2010). We focus on critical feedback because we recognize providing feedback on things learners can improve

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in their work requires educators to engage in careful analyses of what learners are currently doing. It then requires skillful expression to communicate both the work's merits and faults in ways that allow learners to see areas for improvements and progress already made. As such, providing critical feedback is likely to be more challenging than providing other types of feedback, such as praise or an evaluative grade on performance, because critical feedback requires the educator to take in consideration the receiver's vulnerabilities (unlike praise) and their future motivation to continue the work.

Literature in K-12 schools and higher education describes feedback "as a process in which students have an active role to play" (Dawson et al., 2018, p. 2). Early literature emphasized that critical feedback provided information to fill gaps between what receivers understand and what providers aim to have them understand (Hattie & Timperley, 2007; Sadler, 1989). Recent literature goes further than describing the content of feedback to also argue that feedback is considered "effective" if it leads the receiver to engage in actions that will ultimately promote learning. Specifically, providing critical feedback is only effective if receivers of feedback (a) engage with the feedback and (b) learn from that feedback (Boud & Molloy, 2013; Carless & Boud, 2018; Dawson et al., 2018). Thus, when educators skillfully express the merits and faults of learners' work, they ideally encourage learners to actively engage with critical feedback provided.

### 1.2. Learners' experiences of critical feedback: The good and bad

Critical feedback can be impactful for learners. High-quality feedback is vital to learning. In the process of applying high-quality critical feedback, learners can transform a product into something that makes them proud. When provided effectively, critical feedback improves learning outcomes (Hattie & Timperley, 2007; Kluger & DeNisi, 1996). Critical feedback can help learners develop new strategies to apply in the future. It can lead to self-regulation, have a positive influence on achievement, and support lifelong, independent learning practices (Boud, 2000; Carless, Salter, Yang, & Lam, 2011; Gamlem & Munthe, 2013; Hattie, 2009; Van der Schaaf, Baartman, Prins, Oosterbaan, & Schaap, 2013).

Yet, critical feedback can have devastatingly negative effects on learners, including making them feel humiliated, distracting their attention, and deflating their motivation (Carvalho, Martins, Santana, & Feliciano, 2014; Kluger & DeNisi, 1996; Yeager et al., 2014). When adolescents receive critical feedback, they may refrain from asking for help in the future, feel less confident they can accomplish tasks, and develop lower self-esteem (Hattie & Timperley, 2007; Karabenick & Knapp, 1991; Newman & Schwager, 1993). It is essential to understand when learners experience critical feedback as useful rather than aversive. The perception that learners have about feedback on their work's flaws and the ways they interpret this feedback is important to better understanding how critical feedback can be given effectively.

### 1.3. Critical feedback during adolescence

The developmental period of adolescence is a time that may exacerbate learners' sensitivity to critical feedback more than other developmental periods across the life course (DuBois, 2003). This period ranges from 10 to 24, however, the high school aged years (approximately 14–18 years old) may be a period when learners are most resistant to receiving critical feedback. During adolescence young people become more self-aware (Larson & Richards, 1994). As a result, they may become particularly self-conscious when their work is critically evaluated. Adolescents' newly developed abstract thinking skills may increase their likelihood to speculate alternative motives of those providing critical feedback. Adolescents who have previously experienced harsh criticism and those facing regular stigmatization from adults through societal racial stereotypes may be particularly suspicious of those providing critical feedback (Steele, Spencer, & Aronson, 2002;

Yeager et al., 2014). Overall, adolescence is a time in the life course where the risks of learners responding negatively to critical feedback may be heightened. Thus, providing critical feedback that minimizes its negative effects and maximizes its potential to positively impact learners may be particularly challenging during the period of adolescence.

### 1.4. Project-based programs as promising contexts for understanding critical feedback

Project-based youth programs provide a favorable context to explore how these challenges in providing critical feedback can be overcome. Most adolescents voluntarily choose to attend youth programs, are interested in the program topic (e.g., making videos, planning community activities) (Akiva & Horner, 2016), and are intrinsically invested in their projects (Dawes & Larson, 2011). Notably, participants do not receive grades, something external that can often undermine intrinsic motivation (Ryan & Deci, 2000). Additionally, educational research finds that students are more receptive to critical feedback in settings that foster a mastery goal orientation in which individuals are motivated to master a task (Taras, 2002; VandeWalle, Cron, & Slocum, 2001). Projects are designed so adolescents experience mastery as their project develops (Smith et al., 2016). Furthermore, programs cultivate a climate in which mistakes and feedback are recognized to be part of the process to mastery, not as failures (Halpern, 2009).

Additionally, youth participants and adult leaders typically develop positive relationships in youth programs (Hirsch, Deutsch, & DuBois, 2011), which may facilitate the kind of interactions, noted above, that make feedback effective. Adolescents often develop trust in leaders that can make them more receptive to leader input (Griffith & Larson, 2016). Overall, these characteristics – youth investment within a mastery climate and trusting relationships— might facilitate effective feedback processes.

### 1.5. This study

This study explores how critical feedback unfolds from the perspectives of both the receivers and the providers of feedback within project-based youth programs. Although feedback is relational, few studies take into account how receivers of feedback *perceive* that feedback (e.g., Harks, Rakoczy, Hattie, Besser, & Klieme, 2014); and fewer studies bring the receiver and provider perspectives together (e.g., Dawson et al., 2018). In order to bring both perspectives together to generate a nuanced understanding of critical feedback processes, we employed an exploratory qualitative research design. Using qualitative methods was especially important because the way that adolescents perceive critical feedback can provide insight on how to interact with adolescents in a supportive way within a learning context. Thus, our first research question asked how adolescents responded to critical feedback:

RQ1: How did adolescents in project-based youth programs experience critical feedback from adult leaders? Was it discouraging? Was it useful?

We then examined how leaders addressed the challenges of providing critical feedback to adolescents, as reported from both perspectives with our second research question:

RQ2: What strategies did leaders employ – as experienced by adolescents and implemented by adult leaders – that made critical feedback useful to adolescents?

## 2. Methods

Data to address these questions came from interviews conducted within a larger IRB-approved study, The Pathways Project. This study

**Table 1**  
Programs in the sample.

Location	Program, projects, and descriptive information	Examples of work youth engaged in	How and when feedback on work occurred	Interviewees
Chicago, IL	<b>Reel Makers</b> <b>Creating films.</b> Community-based program in a youth-serving organization; 19 youth (ages 14–19; 53% Black, 37% Latino, 5% White, 5% Other); 2 leaders and 1 AmeriCorps intern as well as volunteers	Storyboarding; directing; acting; cinematography; organizing and editing film footage	Informal one-on-one and small group conversations; mini-critique sessions leaders supervise at end of small projects	4 youth, 2 leaders
	<b>Toltecac Muralists</b> <b>Painting murals.</b> Community-based program; 24 youth (ages 14–18; 71% Latino, 25% Black, 4% Other); 1 primary leader and an administrative staff-person	Learning to paint with spray can; stencil project; individual artwork; planning and creating public murals	Informal one-on-one and group conversations; peer group critiques	3 youth, 1 leader
	<b>High Definition</b> <b>Producing an online magazine and creating documentary films.</b> Community-based program in a larger organization; 25 youth (ages 14–18; 80% Latino, 16% Black, 4% White); 1 primary leader	Interviewing community members; writing and editing articles; planning, filming and producing documentary films about the city	Primarily one-on-one conversations	4 youth, 1 leader
	<b>Urban Farmers</b> <b>Growing vegetables and selling them.</b> Community-based program; 18 youth (ages 15–19; 89% Black; 11% Latino); 2 leaders	Planning; planting and tending crops; cooking demonstrations for the public; running farm stand	Weekly feedback session where leaders give feedback to each teen; one-on-one and small group informal conversations	4 youth, 2 leaders
	<b>La Prensa</b> <b>Creating news videos.</b> Community-based program; 15 youth (ages 14–20; 73% Latino, 27% Black); 1 leader	Interviewing and filming people in the neighborhood; organizing and editing video footage	Primarily one-on-one conversations	2 youth, 1 leader
	<b>Rising Leaders</b> <b>Organizing school events and community service activities.</b> School-based program; 54 youth (ages 14–18; 37% White, 28% Latino, 35% Black); 2 leaders	Planning events (e.g. freshman orientation, pep rally, leadership summit for local youth)	Primarily informal conversations within small youth committees planning events	3 youth, 2 leaders
	<b>Nutrition Rocks</b> <b>Planning and running a sequence of summer camps for children focused on promoting healthy diets.</b> Community-based 4-H program; 29 youth (ages 11–19; 90% Black, 7% White, 3% Latino); 2 leaders	Planning learning activities for campers; practice running activities with peers during the school year; lead the activities with elementary school children at camps	Formal group reflections on how the program went after campers leave twice daily; informal one-on-one and small group conversations	5 youth, 2 leaders
	<b>Unified Youth</b> <b>Organizing events for youth and the families in community.</b> Community-based program in a larger program providing services to immigrant families; 9 youth (ages 12–18; 100% Latino); 2 leaders	Developing a PSA on positive health behaviors; plan youth events (i.e., dance) and family events; community service activities	Informal one-on-one and small group conversations	6 youth, 2 leaders
	<b>Emerson High School Drama Club</b> <b>Producing plays and musicals.</b> School-based program; 74 youth (ages 14–18; 66% White, 20% Black, 2% Latino, 12% Other); 2 primary leaders	Developing roles and acting in plays; stage-crew activities such as operating lights and sound	Director provides feedback to the large group and individuals during rehearsals.	4 youth, 2 leaders
	<b>Unity House</b> <b>Planning service activities.</b> Community-based program; 17 youth (ages 14–19; 64% Latino, 21% Black, 15% Other); 1 leader	Conducting service projects; lobbying state legislature	Full group and small group conversations; Informal one-on-one conversations	3 youth, 1 leader
Minneapolis, MN	<b>The Station</b> <b>Planning music concerts.</b> Community-based Boys and Girls Club Program; 38 youth (ages 13–19; 39% White, 39% Latino, 11% Black, 11% Other); 3 leaders	Event planning; working with musicians; supervising homework help; and running other activities for younger youth	Primarily one-on-one conversations	4 youth, 3 leaders
	<b>Voces Unidas</b> <b>Conducting culture-oriented projects.</b> School-based program; 18 youth (ages 14–18; 88% Latino, 12% Other); 3 leaders	Creating mosaic murals and ofrendas; supervising homework help with children.	Primarily one-on-one conversations	3 youth, 3 leaders
	<b>On Target</b> <b>Learning shooting skills and preparing for competitions.</b> Community-based 4-H program; 18 youth (ages 14–19; 100% White); 2 leaders	Learning archery and firearm skills and safety; learning about wildlife; preparing for state and national competitions; conservation projects	Primarily one-on-one conversations	4 youth, 2 leaders

focused on positive development in project-based programs for high-school-aged youth participants.

### 2.1. Sample of programs

Because the goal of the larger project was to better understand processes of positive development, we chose 13 established, high-quality project-based youth programs with experienced adult leaders. High-quality programs were identified using criteria from [McLaughlin, Irby, and Langman \(1994\)](#) including the features of: low youth and staff turnover; meaningful roles for adolescents; experienced leaders; and a youth development focus. Approximately an equal number of programs were selected from Minneapolis-St. Paul, Chicago, and Central Illinois ([Table 1](#)). We selected programs that served low- and middle-income families. An additional criterion was that programs be centered around one or more projects. The sample included arts, technology, and leadership programs.

In each program included in the sample, youth participants worked on projects individually or in teams, with most having multiple projects across their program cycle. The projects included planning community events, creating theater productions, producing community Public Service Announcements, creating films, and painting murals. See [Table 1](#) for details on each program's projects and how feedback fit into participants' work. All leaders provided feedback informally, and some provided it through formal activities (see [Table 1](#), col 4 for details on how that looked in each program). Leaders provided feedback to help participants complete their work, learn technical skills in the program areas, and help improve their process skills for doing the projects (e.g., time management, planning). Finally, leaders provided feedback to help participants gain knowledge of what a good product looks like.

For example, at Nutrition Rocks youth participants created and ran a sequence of summer camps on healthy eating for different groups of elementary school students. During the school year, members worked in teams to develop learning activities to use at the camps. This involved planning activities, trying them out on each other and then on children at a school. They also developed recipes for healthy snacks. During this period, leaders provided feedback on participants' work in conversations with teams and informal one-on-one discussions. During the summer, when they ran the camps, leaders held formal large group reflections twice daily to evaluate how well things had just gone. They asked participants to help them first think of "positives," what had gone well, and then "negatives," what did not go as well. Leaders added their own feedback and helped participants find ways to improve things that had not gone well.

### 2.2. Data collected

**Youth.** Semi-structured interviews were conducted with 49 adolescents (30 female, 19 male) 3/4s of the way into the program cycle to explore how they experienced feedback on their work. All interviewees were selected to be in the study using methods of purposive quota selection ([Miles, Huberman, & Saldana, 2014](#)) with the goal of obtaining a sample that was balanced in terms of gender and mirrored each program's membership in age, ethnicity, and length of participation (two to six adolescents per program). Interviewees were ethnically diverse (22 Latinx, 13 African Americans, 11 European Americans, 3 of "Other" descent). Ninety percent were ages 14–17 (range 12–18).

Our semi-structured interview questions focused on adolescents' experiences receiving critical feedback in the program, including how they responded and how they used it. We asked:

- Do the leaders give you feedback on what you are doing well?
- Do they tell you when you've made a mistake or something isn't as good as it could be?
- Sometimes when adults give feedback about something you are doing wrong it can be annoying or discouraging. Has that

happened?

- o [If no] What is it about the leaders or what they do that keeps it from being annoying or discouraging?
- o [If yes] What made that annoying or discouraging?
- How did you use this feedback? How was it helpful?

We asked probing questions when needed to encourage interviewees to elaborate. We narrowed our interview data to those who reported receiving critical feedback on their projects. Out of the 49 adolescents interviewed, the majority ( $n = 40$ ; 82%) said leaders provided feedback on things they were *not* doing well in the project. Five said leaders gave them only positive feedback or no feedback. Four adolescents were not asked the question, gave an unclear response, or referenced something other than program-related work (i.e., homework help).

**Program Leaders.** We interviewed twenty-four primary adult leaders (14 female, 10 male) across the 13 programs. Leaders had a median experience of six years (range 2–42). Interviewees included 15 full-time staff, five part-time staff, and four volunteers. Leaders' educational backgrounds ranged from a graduate or professional degree ( $n = 9$ ), a bachelor's degree ( $n = 8$ ), attending some college ( $n = 6$ ), and a technical or vocational degree ( $n = 1$ ). The sample included sixteen European Americans, three Latinx, two African Americans, and three of Mixed ethnicities.

Our semi-structured interviews focused on the context in which critical feedback unfolds and the role leaders believed they played in providing feedback effectively. We asked:

- How do youth know if they are making progress or succeeding in their program activities?
- What do you see as your role in providing feedback to the youth?
- Providing feedback can sometimes be hard. Do you have personal guidelines for when and how you provide feedback to youth? Can you give me an example?

The adult leaders generally spoke in detail, however, we probed if needed to understand their strategies and goals in providing feedback.

### 2.3. Data analyses

A team of four researchers conducted the data analyses. This team included one Black female, one White male, and two White females who each had experience researching, working, or attending youth programs. Two team members were experts in qualitative research methods and two were students who were trained in these methods for the project.

The goal of the analyses was to examine how leaders' provision of critical feedback was experienced by youth participants and adult leaders. We employed strategies from constructivist grounded theory methodology ([Charmaz, 2014](#)) and consensual qualitative research ([Hill, Knox, Thompson, Williams, & Hess, 2005](#)). Constructivist grounded theory builds upon original conceptions of grounded theory ([Glaser & Strauss, 1967](#)) in that it puts forth a series of analytical guidelines aimed at the creation of theory grounded in the data, with an emphasis on process and the study of action while acknowledging theory does not emerge separate from the researcher ([Charmaz, 2014](#)). We used strategies and guidelines from constructivist grounded theory to iteratively develop codes from the interview data aimed at capturing youth participants' and leaders' processes as they experienced them. Consensual qualitative research, also grounded in constructivist tradition, uses an iterative process of consensus building in a research team to make meaning of data ([Hill et al., 2005](#)). We used strategies from consensual qualitative research to guide how we worked as a team to engage in consensus building. We had regular meetings to discuss initial open coding, generate data-driven focused codes, come to an agreement on coding, compare memos, and discuss emerging themes.

Analyses began with the youth interview data and preceded through four steps. All steps of analyses were driven by the replies of the interviewees (rather than codes determined a priori).

**Step 1.** We first addressed RQ1 by separately evaluating whether youth program participants experienced critical feedback in the program as aversive and/or useful. In order to evaluate whether program participants experienced critical feedback as aversive, we conducted descriptive analyses of youth interviewees' responses to the question about the feedback being "annoying or discouraging." In order to evaluate if it was useful we conducted descriptive analyses of interviewees' responses to the question: "How did you use this feedback? How was it helpful?"

**Step 2.** The analyses to address RQ2 on leaders' strategies involved the next three steps. These steps involved employing constructivist grounded theory strategies in an iterative process of analysis. We began by examining youth interviewees' reports on how leaders provided critical feedback in ways that made it useful by engaging in iterative coding across all of the youth interview data. We line-by-line coded youth data with action verbs, developed more precise focused codes from the open coding to apply to the rest of the youth interview data, and then engaged in constant comparison of excerpts within codes to identify patterns. Across the process we wrote memos on what was coming up in the data. This led to the identification of three preliminary "features" that adolescents said made the adult leaders' feedback useful.

**Step 3.** The next step of analyses focused on adult leaders' descriptions of how they provided useful feedback (including how they saw their role and the "guidelines" they followed). Our goal in this step was to independently identify features of critical feedback that leaders saw as useful to adolescents. We identified the features of how they provided critical feedback that they described as useful.

**Step 4.** In a final step of theoretical analyses we compared findings from the prior two steps. We evaluated similarities and differences between the youth participants' reports on the features of adult leaders' feedback with adult leaders' reports on how they provided feedback. This analysis yielded the conclusion that both youth participants and adult leaders identified the same three features of useful critical feedback. However, leaders' accounts included an additional dimension – that of an educator implementing these features in ways that created the experiences described by the youth participants.

Throughout data analyses we consulted extant literature on feedback in educational settings. This provided sensitizing concepts (Charmaz, 2014), which attuned us to emerging themes in the data. Towards the end of analyses, this literature allowed us to contextualize the critical feedback processes we identified and reflect on how the project-based youth program context compares to formal educational contexts. All names (of participants, leaders, programs) are pseudonyms.

### 3. Findings

#### 3.1. RQ1: Critical feedback did not feel discouraging and was useful

Our initial analyses examined how participants experienced critical feedback from program leaders. Out of the 40 adolescents in the sample, 33 said they never ( $n = 29$ ) or only sometimes ( $n = 4$ ) found critical feedback from the leaders annoying or discouraging. Thus, the majority of adolescents did not have the negative emotional reactions that typically lead to disengaging with critical feedback. In the findings we describe the characteristics of this critical feedback that minimized negative emotional reactions and made adolescents more receptive to it.

The youth participants also reported critical feedback was useful to their work and learning. They described four ways in which receiving critical feedback helped them: it primed their thought processes, motivated them, enabled them to improve their project, and prepared them for next time they created a similar project (see Table 2 for

representative quotes). These findings are consistent with research showing effective feedback evokes changes and deeper understandings of the present task and prepares the receiver for future tasks (Carless & Boud, 2018; Gamlem & Munthe, 2013; Van der Schaaf et al., 2013). We next discuss what features made the feedback provided non-aversive and useful.

#### 3.2. RQ2: What made leaders' critical feedback useful

Analyses of the data from participants and leaders indicated that the critical feedback was non-aversive and useful because it was provided in ways that were: (a) straightforward, clear, and balanced, (b) empathetic, and (c) privileged youth ownership of the work through dialogue. For each feature, we begin with an overarching description of the feature. We then provide examples from youth participants of how they experienced the feature. We conclude with examples from leaders to illustrate their intentions and instructional strategies they used to achieve each feature. These often related to addressing the challenges of giving feedback to adolescents (including how to reduce experiences of hurt, annoyance, and discouragement).

**Feature #1: Straightforward, Clear, and Balanced.** Useful critical feedback was straightforward, clear, and balanced in providing constructive information with affirmations of the progress a youth was making in specific areas. Participants experienced feedback positively because it was clear, actionable, and honest. Similarly, leaders reported intentionally delivering honest and direct feedback. However, leaders further described the importance of coupling honest critical feedback with specifics on what was positive about the work.

The youth participants described preferring straightforward, clear, and honest feedback they could act on. When feedback was easy to understand, the participants could use it to successfully accomplish their project tasks. The youth participants reported valuing leaders' critical feedback because it was stated "in a way that made sense," was "straightforward and meaningful," and when leaders provided it "they'll explain it to you more." For example, Carisa at High Definition preferred the detailed feedback the leaders provided on videos they produced, stating: "[the program leader is] always honest with us: '[Well] the video is too shaky... there is so much going on in the background and maybe you should go out and take it again'. She does that and that is how we learn." The participants said leaders' straightforward feedback allowed them to apply it directly to improve their work.

In alignment with the youth interview data, leaders described intentionally providing direct and honest feedback. Leaders reported being "really specific about what we're talking about" rather than giving general critiques. In addition to always remaining honest with the adolescents, a majority of leaders reported trying to be positive so as not to dampen participants' spirits. They described how integrating clear, honest criticism with clear and specific comments regarding positive progress helped participants trust what leaders were saying and allowed participants to better act upon the feedback. Leaders emphasized the importance of "[being] honest with them all the time...[yet] mak[ing] sure I give them a positive [comment]," and "being honest" while providing affirmation. Jenna Frank, at Unity House, stated: "I'm very upfront. I see [feedback] as a way of being transparent in how they're doing. And I think hearing both the positives and the challenges are really important." Leaders' strategy of coupling honest information about specific positives and negatives was aimed at providing affirmation while helping adolescents improve their work.

**Feature #2: Empathetic.** Useful critical feedback was delivered in a way that was empathetic and sensitive to the feelings of the receiver. Participants experienced feedback as encouraging because leaders delivered critical feedback calmly, kindly, and respectfully. The participants also appreciated the critical feedback because they had positive relationships with the leaders. Leaders reported understanding and anticipating the ways in which feedback might be aversive to



**Table 2**

Ways youth participants found critical feedback useful.

Primed thought process	<p>–“It just made me rethink my strategies.”(Joseph at High Definition)</p> <p>–“Then just we have something to focus on and something to work towards.” (Frankie at Emerson Drama Club)</p> <p>–“It helps me look at different views. It helps me see different aspects of things. So if they have a suggestion – maybe it looks better that way. Maybe I wasn’t thinking that way. Maybe I can combine both of ours together.” (Ethan at Rising Leaders)</p>
Feel motivated	<p>–“It tends to encourage me to do more work and [be] better at it.” (Allie at Reel Makers)</p> <p>–“[It] make[s] us be more motivated to finish it or correct it.” (Delphia at Toltec Muralists)</p>
Improved project	<p>–“[It helps me] fix the problem at hand.” (Luke at On Target)</p> <p>–“It helped us better our audio so it wouldn’t sound weird and it would be good.” (Valeria at High Definition)</p> <p>–“I use feedback to like fix a problem or improve the job I’m doing.” (Prashant at Emerson Drama Club)</p>
Be prepared for next time	<p>–“It just helps me to do it better the next time I’m doing it.” (Lucia at Urban Farmers)</p> <p>–“It gives you more inspiration to kind of do something similar to that again and now you know exactly the process and you can probably make it even better than the first time.” (Alexis at Rising Leaders)</p>

participants. Leaders were intentional in providing critical feedback, acting with attunement to potential vulnerabilities in adolescents’ emotional responses.

Clear, specific content was important, but, as Lucy explained about the leader at La Prensa: “It’s both what he says and how he says it.” The affective manner in which critical feedback was delivered mattered. Many participants reported what made them open to using the leaders’ straightforward and clear feedback was how: “they talk to you in a calm way”, “he’s not really yelling at us or putting us on the spot”, and “when they tell you, ‘Oh, something is bad,’ they tell you in a very nice way.” Other youth participants did not mention a leader’s tone of voice but did emphasize their relationship with the leader. They were receptive to critical feedback because: “they’re one of us... they’re like family” and it is “on such a friendship level it is not like someone above you telling, ‘You did something bad,’ it is more constructive criticism. Maybe I can handle it.” Often youth participants pointed to the feedback being embedded in a personal relationship with the leader, which helped adolescents not take the critical feedback personally and made adolescents more receptive to feedback.

Leaders indicated they intentionally considered how critical feedback might affect adolescents by focusing on the participants’ feelings when providing critical feedback. They described their empathetic delivery by reporting: “it just takes flexibility and, like, keen perception of their emotions” and that it is essential to “not embarrass anyone or make anyone uncomfortable.” For example, Silvano Ochoa at Voces Unidas explained, “we have to really stay away from making judgments that’s going to hurt. A critical response or assessment is important because you’re stating observations but not making them personal.” Silvano Ochoa’s emphasis on not making critical feedback personal illustrates how leaders tried to be sensitive to participants’ feelings, understanding feedback could be painful. As such, they were aware of adolescents’ possible feelings, especially to negative judgments adolescents could form about themselves.

**Feature #3: Privileges Youth Ownership of the Work through Dialogue.** Useful critical feedback was structured in a way that involved dialogue between leaders and participants that privileged youth ownership of the work. Critical feedback was embedded in conversations that prioritized participants deciding their own next steps for their projects. Participants experienced feedback as being part of a conversation that respected and included their ideas. Leaders discussed how the purpose of engaging in two-way conversations around critical feedback was to put agency back on the adolescents. They reported it as part of larger strategies aimed at encouraging participants’ active engagement in their learning, particularly self-evaluation.

It was not just that feedback was straightforward and empathetic. The participants reported valuing critical feedback because leaders structured their critical feedback in a way that was open to a youth’s ideas during the process of creating the project. Youth participants recalled conversational techniques that leaders engaged in to make them

feel like their own ideas were important. The adolescents reported that leaders did this through active listening, prodding questions, and nonthreatening “suggestions.” Some described how this process of receiving “suggestions” in conversations with leaders involved leaders considering participants’ viewpoint— even if it contrasted with the leaders’ suggestions. For instance, Victoria at On Target reported her leaders would frequently say, “Hey, I notice[d] this, I didn’t really agree with it. I didn’t think it was quite how you should do it. Can you explain it more to me?” After she would explain it to the leaders, she described how the leaders would “either say, ‘Oh yeah, I see that now, try this instead’ or they’ll kind of say, ‘Ok,’ and go along with it.” Victoria and other participants noticed that critical feedback often involved a conversation. Through conversation the adolescents felt their ideas were included and respected in the process of receiving and discussing critical feedback.

Adult leaders discussed this feature much more than the youth participants. Leaders elaborated on how they intentionally engaged in dialogue to promote their learning goals for participants. Although programs varied in how youth-driven or adult-driven they were, most leaders reported structuring informal and/or formal conversations to encourage participants to engage in self-evaluation. They also structured feedback in ways that gave adolescents a degree of ownership of the direction of the work. Leaders reported having conversations with the participants in which they integrated the leader’s feedback in ways that also reinforced that the adolescents had choice. Within these conversations, leaders gave youth participants “little tricks,” provided “polite suggestions,” and facilitated peer feedback. Leaders described posing questions that encouraged adolescents to evaluate their work, and then think creatively about how to improve the project. Leaders discussed doing this in order to help adolescents internalize processes of work revision.

Some structured feedback by having formal rituals that incorporated evaluations while scaffolding the process of evaluation. For example, Pamela West at Nutrition Rocks described structuring daily group reflections on the activities youth participants did with children: “I ask them straight out, ‘How do you think today went?’” She continued, “And then when I ask them for the negatives, I ask them, ‘How do you think we could make this better? How could you make this better?’” Pamela West used questions that scaffolded the steps one takes when improving their work by asking for participants’ assessment but also how they could address the assessment in the future. Leaders felt that privileging youth’s ownership of the work facilitated their ultimate goal for providing critical feedback, that the adolescents: “start to self-police a little bit,” have “a chance to be constructively criticized and be able to respond to it,” and “to help them see the bigger picture of their actions, decisions, or potential [actions].” Overall, these conversations facilitated process feedback, something research shows is an important and effective form of feedback (Hattie & Timperley, 2007).

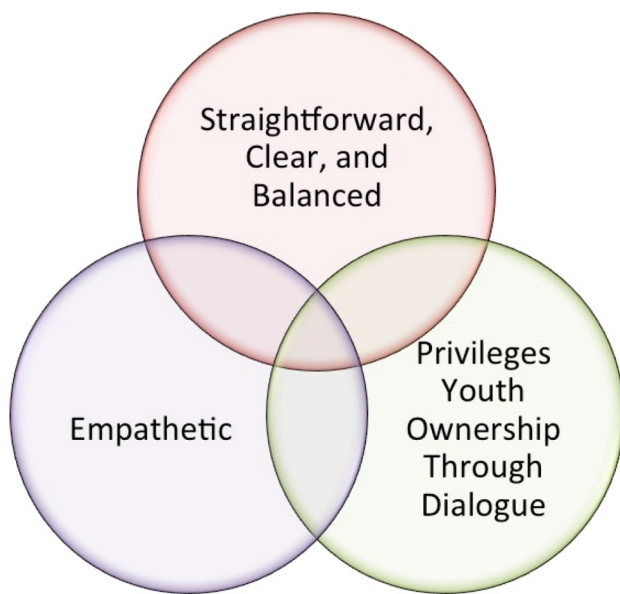


Fig. 1. Useful critical feedback processes across the arc of a project-based youth program.

#### 4. Discussion

We explored two questions in this study: (1) How did adolescents in project-based youth programs experience critical feedback from adult leaders? Was it discouraging? Was it useful? and (2) What strategies did leaders employ—as experienced by adolescents and implemented by leaders—that made critical feedback useful to adolescents? Most of the youth interviewees reported that critical feedback was non-aversive and useful. They perceived that leaders were, as one youth said: “always putting you up. They’re never shutting you down.” We found leaders intentionally did this by ensuring participants received the critical feedback in a manner that was (1) straightforward, clear, and balanced, (2) empathetic, and (3) involved dialogues that privileged youth ownership of the work. These three features suggest there was an art to providing critical feedback. Using extant literature, we discuss this art by speculating why the features identified may be important. We then propose a model for conceptualizing useful critical feedback in project-based youth programs.

Extant literature suggests that the first feature we identified—providing critical feedback that is straightforward, clear, and balanced with affirmations on progress made—likely enhances participants’ learning by increasing the receiver’s ability to understand exactly what the feedback is saying (Chanock, 2000). Straightforward, clear, and specific feedback can help learners build mastery because they are better able to act upon it and then see the results of their actions. Leaders’ emphasis on coupling areas of improvement with information on the positives in the work likely helps adolescents measure their progress realistically and fosters their engagement. A constant stream of feedback on things that are wrong (or that could be improved) can dampen student motivation in the work. In contrast, supporting teens’ “positive motivational beliefs and self-esteem” is posited to be a good feedback practice (Nicol & Macfarlane-Dick, 2006; p. 205). This is likely to be especially true for adolescents.

The second feature of useful critical feedback we identified—empathetic delivery—may motivate participants to take action on feedback because it indicates leaders are attuned to their needs and care. Voerman, Korthagen, Meijer, and Jan Simons (2014) argue that critical feedback can elicit positive reactions based on: “the context and the relationship with the provider of the feedback” (p.94). When youth participants trust leaders “on a friendship level,” they may be more likely to consider leaders’ suggestions (Griffith & Larson, 2016).

Experiencing leaders as empathic, trustworthy, and supportive can motivate adolescents to engage more deeply with leaders’ input, especially in programs where they are typically quite invested in their projects.

The final feature of useful critical feedback we identified—being embedded in a dialogue privileging youth ownership of the work—likely increases adolescents’ agency and autonomy. Two-way exchange on the process of creating a project rather than one-way transmission of an assessment of the project is essential for high quality feedback (Hattie & Timperley, 2007) and is perceived as useful by receivers of feedback (Harks et al., 2014). In order for feedback to be as effective as possible, it has been argued that learners need space to actively deconstruct feedback to fully understand it (Higgins, Hartley, & Skelton, 2002). Active listening, prodding questions, and nonthreatening “suggestions” can create a space where adolescents actively deconstruct feedback, turning it into something meaningful, actionable, and useful for supporting their goals for their work.

The features we identified are likely to be especially important during the period of adolescence. In an act of juggling both the emergence of abstract thinking, as well as acute awareness of others’ opinions, adolescents are particularly sensitive to criticism (DuBois, 2003). Leaders in this study intentionally catered to these developing capabilities and sensitivity by providing feedback that challenged the adolescents’ thinking in a nonjudgmental way. Straightforward and empathetic comments increased the chance of participants applying the feedback, while decreasing participants misperceiving feedback as criticism of their person, rather than their work. Engaging in dialogues that privilege youth ownership while providing feedback is especially developmentally appropriate for adolescents’ growing desire for greater autonomy (Daddis, 2011; Meschke, Peter, & Bartholomae, 2012).

##### 4.1. The core of useful critical feedback

We propose a model to represent useful critical feedback processes as a Venn diagram of the three features—being straightforward, clear, and balanced; showing empathy; and privileging youth ownership through dialogue (see Fig. 1). We speculate that the core of useful critical feedback lies where these features overlap. We call this area of overlap “core” because these are elements practitioners may want to be attuned to in their practices across the arc of a program. When leaders incorporate all three features over the course of a project-based youth program, it is likely that they work together to promote learning.

We argue all three features must be present at some point across the arc of a program and that critical feedback is likely to be less useful when one of the features is missing. For instance, an adolescent is unlikely to be receptive to an adult who is honest (i.e., straightforward, clear, and balanced) yet does not demonstrate a sensitivity to their feelings (i.e., empathetic). Likewise, adolescents are unlikely to fully improve a project if an adult is overly sensitive to the adolescent’s feelings (i.e., empathetic) without being straightforward on areas needing improvement and areas in which they are making progress (i.e., straightforward, clear, and balanced) because receivers of feedback need specific guidance in order to carry out changes (Chanock, 2000). Additionally, an adolescent may be less likely to use feedback if adults incorporate them in conversations (i.e., privileging youth ownership) but are unclear in what they are saying (i.e., straightforward, clear, and balanced). Finally, feedback will not be valuable to adolescents if an adult’s goals, instructions, and feedback are clear and direct (i.e., straightforward, clear, and balanced), but the adolescent has not bought into those goals through open dialogue (Orsmond, Merry, & Reiling, 2002; i.e., privileging youth ownership through dialogue). Hence, we propose that each feature is important as part of the whole and is likely to ensure adolescents actively engage with the feedback provided (something key to learning; Boud & Molloy, 2013; Carless & Boud, 2018; Dawson et al., 2018). It is possible, however, that certain features may be more important than others at particular times in the

program cycle.

**Implications for Practice.** These findings may be useful for youth development practitioners to consider processes that may not be explicitly discussed in the field. We hope this proposed model can serve as a starting point for program staff to reflect on the process of providing feedback. The model is general enough to be applicable to multiple project-based programs. Yet, it also includes elements specific enough to generate discussion on the nuances of critical feedback processes within a program. Therefore, it could generate a conversation amongst program staff within any project-based program to discuss how feedback looks in their specific program, how they want feedback to look, and techniques to accomplish this. We also believe such a model can be used to enable practitioners to engage in their own reflective practice. For example, it can serve as a way to observe one's own interactions with participants and reflect on how these may have been experienced from the perspective of the adolescents. Thus, rather than being prescriptive, this proposed model can facilitate reflective practice.

#### 4.2. Limitations and future research

This study depended on retrospective accounts. As a result, some of the interviewees were not specific about the details of the process by which the critical feedback was received or provided. Future research could use video recordings to conduct observations of feedback processes in action. The receivers and providers of feedback could then be interviewed to describe their perspectives on the specific feedback transactions shown in the video. Such data may also provide information on the extent to which the features are interwoven in practice. In addition, future research should explore the accuracy of the current model and whether one feature is more important than another. Future research should also systematically explore whether certain features are emphasized more when programs have a strong emphasis on youth voice. Finally, future research should explore how adolescents' previous experiences with feedback in other contexts may lead to individual differences in their experiences with feedback in a project-based youth program.

#### 5. Conclusions

This study provides insight on useful critical feedback processes. We acknowledge that in project-based youth programs, like the ones in our sample, adolescents are highly motivated because they voluntarily choose to attend the program; leaders have time to allow youth agency, develop relationships, and have conversations; leaders are not constrained by standardized tests; and grades are not a driving force. Nonetheless, educators in schools can learn from the features of critical feedback in project-based programs because experienced leaders have expertise stemming from long-standing pedagogical goals espoused by such programs. The features of the critical feedback processes we identified in this study—straightforward, clear, and balanced; empathetic; privileging youth ownership through ongoing dialogue—are key to all learning contexts serving adolescents.

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#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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