

Planning for Program Design and Assessment Using Value Creation Frameworks

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As learning centers consider the design and assessment of their programs, they develop learning outcomes for the students who use their services and develop assessment plans that articulate how they will measure student learning and program effectiveness. This often means that assessment data and program outcomes are the primary concern.

A more encompassing approach to the program design process begins with considering the student experience and what students gain after utilizing learning center services. For example, increased student confidence may be named as a desired outcome. This outcome can be achieved as a result of guiding student development of effective skills for succeeding in challenging learning environments. So while program staff may assess for the outcome of increased confidence, the planning process should design learning and training experiences for potential impact. Articulating the purpose of the program before recognizing the desired outcomes ensures that all aspects of the program are connected and work together to bring value to students and to the institution as a whole.

This article explains a program design and planning process using the Value Creation Framework (VCF) developed by Wenger, Trayner, and de Laat (2011). The framework involves identifying types of value or benefit for those involved in the program, conditions and activities that support creation of that value, data that measure whether the value was created, as well as strategic effect of that value for individuals and the institution. This article explains how we used the VCF to re-design and plan assessment for our learning center area. Our goal in articulating our process is to provide a tool that others can use in their contexts while showcasing a new

perspective on how to approach program design and assessment.

Institutional Context

We in the Course Support Programs unit of the Westmoreland Academic Success Center (ASC) at Clemson University recently found ourselves at a juncture in the history of our programs. Since the ASC's inception in 2001, the Supplemental Instruction (SI) program and the tutoring program operated as separate units, with the coordinators holding parallel and equal positions on the organizational chart. In March 2016, as part of the ASC's reorganization, SI and tutoring became their own Course Support Programs unit, with a new position of assistant director established to coordinate these services. Over the following year, the new assistant director hired assistant coordinators for tutoring and for the reshaped and renamed SI program, now known as Peer-Assisted Learning (PAL). The desire to increase collaboration between the two areas and train the peer leaders together where the content of their practices overlap motivated the combination of these services.

With this new approach to services and new staff in place, the unit needed a tool to help us think about the services, how they interrelate, and how aspects of each service shape the impact on student learning, both for peer leaders and participants.

The PAL program organizes its 130 peer leaders into 10 communities of practice, each with a peer mentor. Communities of practice are "learning partnership[s] among people who find it useful to learn from and with each other about a particular domain" (Wenger, Trayner, & de Laat, 2011, p. 9). We organized into communities of practice (Wenger, McDermott, & Snyder, 2002) to support the ongoing training and leadership development of peer leaders. In their communities, peer leaders identify and engage in projects or inquiry to become better facilitators of collaborative study sessions. Additionally, the tutoring program is moving towards a community of practice approach as well, and will organize its 65 peer tutors into clusters, each facilitated by a peer mentor. Tutors and PAL leaders participate in 8-10 hours of initial training before the semester begins. The peer leaders also enroll in a one-credit course (pass/no pass) in which they integrate into their practice what they

learn in training. The Entangled Learning model guides their learning process (Whisler & Treuer, 2017; Whisler, Makos, & Anderson, 2017). The tutoring program has level three certification from the College Reading and Learning Association (CRLA), and level three training will also be available for experienced PAL leaders who want to advance their conceptual understanding and improve their skills. Integrating the PAL and tutoring programs in this way creates a complex system that introduces multiple considerations as we move toward a cohesive mission and vision for our unit. We knew that re-designing and planning the execution and delivery of our services would require a blueprint that would help us lay out our vision and construct our implementation.

CLADEA Literature on Program Planning and Assessment

The literature on program planning for academic support is sparse. Searches of the journals published by member organizations of the Council of Learning Assistance and Developmental Education Associations (CLADEA) uncovered one article that addresses program planning (Elifson, Pounds, & Stone, 1995). Assessment received more attention. One article discussed the value of conducting needs assessment (Payne, Hodges, & Hernandez, 2017). Two articles addressed overall assessment of a learning center (Trammell, 2005; Berkopes, & Abshire, 2016). Numerous articles in these journals described approaches to assessing a particular service area or of the effect of that area on aspects of student learning (Hendriksen & Yang, 2005; Frost & Braun, 2006; Cooper, 2010; Bell & Frost, 2012; Bruch & Reynolds, 2012; Fullmer, 2012; Price, Lumpkin, Seemann, & Bell, 2012; Ticknor, Shaw, & Howard, 2014; Riodi, 2016). Assessment of SI and PAL programs predominantly appeared elsewhere in the professional literature besides in CLADEA member organizations' publications, such as in the *Journal of Peer Learning*. Articles also discussed assessment of student learning or of the effectiveness of learning strategies courses (Boysen & McGuire, 2005; Norton, 2006; Bail, Zhang, & Tachiyama, 2008; Burchard, & Swerdzewski, 2009). However, this literature did not consider purpose-driven program design in its approach to planning and assessment.

The Value Creation Framework

We discovered the Value Creation Framework while participating in a workshop on communities of practice led by Etienne and Beverly Wenger-Trayner. Their VCF was originally developed as a way to conceptualize and assess the value that communities of practice and social networks generate (Wenger, Trayner, & de Laat, 2011). Working through the VCF process enables users to identify sources of quantitative and qualitative data, and it suggests what stories to collect which will validate the effectiveness of the community (Wenger, Trayner, & de Laat, 2011). These data sources attribute outcomes to the influence of the community rather than to external factors (Wenger, Trayner, & de Laat, 2011). For example, if a certain outcome is achieved, the stories will show whether the outcome was a result of direct action by the community or a correlational result of changing environmental factors. For instance, if a participant in a tutoring program reports higher confidence at the end of the semester, a story gathered from that participant can clarify the reason for the increased confidence. Communities and organizations have used the framework as both a planning tool and as an assessment tool (Guldborg, Mackness, Makriyannis, & Tait, 2013; Collins, Wiebe, & Van Dyk, 2014; Cowan, & Menchaca, 2014; McKellar, Pitzul, Yi, & Cole, 2014; Menchaca, & Cowan, 2014; Booth, & Kellogg, 2015). As we participated in the communities of practice workshop, we were inspired to utilize the VCF as a resource for program design to achieve our new vision for integrating our PAL and tutoring programs.

Originally, there were five types of value identified in the framework, but the framework was recently expanded to include two additional types of value that relate to the other five (Wenger-Trayner & Wenger-Trayner, 2017). The VCF's seven levels of value prompt planners to consider what makes a community of practice effective, meaningful, or valuable at different stages of engagement from a variety of perspectives. The framework includes the following five original types of value:

- Immediate Value: what the members experience or feel through participating
- Potential Value: how these experiences enrich the members
- Applied Value: how the members use what they have learned

- Realized Value: what results from the members using what they learned
- Transformative Value: how the members are or the community is changed through the members' experiences and use of what they learned

Two additional types of value intersect each of these five:

- Enabling Value: the necessary conditions that support each level of value creation
- Strategic Value: the benefit that results for the organization or broader context

Each level of value articulates a particular stage of engagement that a member experiences with the community: from the member's initial experience to changes the member brings to the community as he or she applies what was learned. Initially, value is considered for the community members, but as higher levels of value are considered, other stakeholders beyond the community are included, such as external constituents. Each level of value is defined by aspirations and conditions necessary for achieving those goals, risks and mitigating factors, and activities and indicators (Wenger-Trayner & Wenger-Trayner, 2017). When we applied the VCF in a programmatic context, we were able to link the aspirations to the outcomes that we wanted to see from the services we offer. Identifying supportive conditions and factors to mitigate risks helped us imagine the environment that would be necessary to achieve the aspirational outcomes and identify actions that might avoid potential obstacles. Outlining activities, such as elements to include in sessions or characteristics to note during observations, charted avenues to achieve with intention our aspirational outcomes. These aspects of program design laid the foundation for determining indicators to evaluate the success of our services in reaching the defined outcomes, thereby providing a feedback loop for informed program development in the future. The VCF provided a scaffold for us to consider the value added for individual student users of our services and ultimately carried through to the broader institutional context.

We want to share our experience with the VCF as we mapped out our vision for our program and found clarity and focus as we prepared to implement our plan in the upcoming academic year. We

hope our experience will resonate beyond our learning center context and be useful for others as they embark on their journey of program design.

How We Used the Value Creation Framework

We came together during our first staff retreat to lay out our aspirations for integrating the previously separate PAL and tutoring areas within our unit. We recognized that in order to blend our roles, we needed to consider our reasons for implementing increased collaboration into our programs and their connection to our aspirations for PAL and tutoring. The VCF became a blueprint for us to consider the “why” of our programs and articulate a process that initiated a new phase in the history and development of our unit.

We started our program design process by identifying the two populations that we would consider: 1) PAL leaders and tutors, and 2) participants who utilize our services. By distinguishing between these two groups, we concentrated our efforts on what values and outcomes we hoped each of those groups would gain from their experience with Course Support Programs. We used tables to outline each level of value in the VCF. For example, one table outlined aspects (aspirations, conditions, mitigating factors, activities, and indicators) of immediate value for PAL and tutoring participants. We created a similar table for each of the other four main values in the framework as illustrated in Appendix A. (A complete set of tables is available to view at <http://tinyurl.com/yd5fff97>.) Because activities and enabling value overlap in some circumstances, we combined these aspects into a single column in our tables. Strategic value is an overarching aspect that we considered for all levels of value, so we placed it as a separate column in all of our value tables. This enabled us to clearly articulate the importance of our services to other stakeholders in the broader institutional context.

Based on our individual experiences with PAL and tutoring, the feedback that peer leaders have given us, and what we know are beneficial factors in productive learning, we each began contributing to aspirations we thought were instrumental to the program. We made a list of aspirations for immediate value - for what session participants would feel as a result of attending a PAL or tutoring session - and then developed each aspiration sequentially through

the other value levels one aspiration at a time. For example, one aspirational theme articulates developing learning capacity among session participants:

- Immediate value (Experience): Session participants will feel confident that they can study effectively because they leave the session equipped with learning strategies and improved understanding of the material.
- Potential value (Enrichment): Session participants develop problem-solving strategies, learning strategies, understanding of the concepts, and knowledge of specific activities and when to use them, based on an awareness of how they think and learn.
- Applied value (Application): Session participants use metacognitive awareness in the course for which they sought PAL/tutoring support and in other courses as well.
- Realized value (Result): Session participants have greater academic achievement in the form of higher grades, higher GPA, increased academic self-efficacy, higher retention rate, higher course completion rate, increased self-awareness of their learning strengths, and smaller achievement gap for underserved populations.
- Transformative value (Impact): Well-educated alumni add value to places of employment or graduate programs.

Once we articulated how we envisioned each aspiration carrying through each level of value, we worked through the other columns on our table (shown in Appendix A and in the full example available at <http://tinyurl.com/yd5fff97>). Articulating the conditions that would need to exist for the aspiration to occur was relatively straightforward. Following our example above, a condition for participants to feel confident and well-equipped (immediate value) is that the PAL leaders and tutors use the learning strategies they are taught during training. Imagining potential risks or obstacles was sometimes challenging, but we discovered that the mitigating factors revealed aspects of messaging or important components of peer leader training that we might otherwise have missed. Indicators that the aspiration was met were usually easy to articulate, as were

quantitative and qualitative data points we could collect. Data showing whether participants feel confident and well-equipped comes from documentation we already collect such as observation reports, session plans, and surveys. Activities and enabling value point actions that must happen in order to meet the prescribed condition, such as effectively training peer leaders and supporting skill development. Articulating the strategic value challenged us to connect what happens within a PAL or tutoring session or within peer leader training to broader departmental and institutional values and outcomes. For our example, this meant considering the sense of identity and belonging of our participants within the broader institutional community.

With our Value Creation tables complete, we reconfigured these tables into assessment tables based on our defined aspirations. As illustrated in Appendix B, we changed the “Indicators and Data” column from the value table to separate “Assessment Categories” and “Assessment Items” columns in the assessment table. The “Assessment Categories” column links each aspiration to a type of assessment, making it easier to gather information together for each aspiration. Creating the “Assessment Items” column indicates what information is to be collected or what questions to ask on surveys. For example, one plan is to require PAL leaders and tutors to use a specific wrap-up activity to permit assessment of problem-solving skills that participants may have learned during the session. The assessment table also included an “Implementation/Timeline” column, which facilitates planning for the year. We used information from this table to develop our unit’s overall assessment plan, which also will include standard quantitative metrics derived from course grades, freshman to sophomore retention, satisfaction surveys, and other typical success indicators. We look forward to using the VCF and assessment tables to guide our planning, training, and assessment during the 2017-2018 academic year. Using the VCF as a reference ensures that as we revise the peer leader manual during the summer, we include messaging and training content to help us attain certain aspirations for the peer leaders. It has informed a concurrent revision to tutoring and PAL observation forms to ensure that assessment information is collected that relates to particular aspirations.

Results of Using the Value Creation Framework for Program Design

Although it was intended for use with communities of practice, we applied the VCF as a tool to understand how the tutoring and PAL programs work from the perspectives of the peer leaders and what the programs offer the student participants. The positive, energizing process we experienced as we used the VCF to reconceive our unit prompted us to share this discovery so that other learning support staff could benefit from our experience.

The framework became a scaffold that led us through a process of thinking about why our unit impacts student learning, and it caused us to consider explicitly the meaning and purpose of all that we do. It challenged us to articulate these values as aspirations for our peer leaders and student participants as they engage in our support areas and as they move into their careers after graduation. It also challenged us to connect our vision and aspirations with the strategic domain of the university. We are now able to articulate more clearly why it is important to the university that our unit has undergraduate peer leadership, for example. Most importantly for us, using the VCF enabled us to think through the life cycle of peer leaders and participants in our program in a fine-grained analysis that required intentional focus and discipline to imagine how experiences at each level informed (or hindered) the next. For example, the Immediate Value aspiration that participants will feel a connection with the PAL leader or tutor (aspiration #4 on the tables available at <http://tinyurl.com/yd5fff97>) suggests the potential value, realized when they leave the session, that participants trust the peer leader as a mentor or guide. Connecting these two levels of value prompted us to think carefully about what conditions would create trust: the peer leader has to communicate well, relate well, and feel confident in their role. Considering how to achieve this informed the content of training so that the value would be achieved.

As a result, we now have a much better shared understanding of every aspect of our areas and their potential effect on our students, from initial recruiting contact through graduates' potential contributions in their future employment. We understand what we want the PAL leaders and tutors to gain from working in these roles

and what competencies and dispositions we hope the participants will gain. These aspirations helped us identify specific activities and think about what we are doing (or could do) to build in value that will shape student experiences with our programs. That is, we were able to more clearly envision the connections between peer leader training and intended outcomes for our student participants. For example, to achieve the aspiration that participants will develop problem-solving strategies (Potential Value #2 in the example at <http://tinyurl.com/yd5fff97>), a necessary condition is that the PAL leaders and tutors will understand how to facilitate these skills and strategies. This condition identified a necessary component for our tutors and PAL leader training, which was represented as an aspiration for them on a separate set of VCF tables. As a result, we achieved a major shift in perspective for formative program assessment away from evaluating behaviors (i.e. a list of actions we want to see when conducting observations) to evaluating skillful practices (i.e. addressing why behaviors are important in the context of the program values).

Reflection and Conclusions

Using the VCF for our program design and assessment planning generated benefits for our team beyond the actual work that we accomplished. The process was a vehicle for team development, both for interpersonal relationships and for understanding the coordinator's collaborative leadership style. A key to our success was that each of us worked as equals. Although the coordinator had a general vision for our unit, she did not impose a specific list of expectations that constrained the Value Creation process. This allowed us to develop the details of the vision together. The process ensured that, as a newly created team, we developed shared understanding, goals, and processes for our work together.

Our program design process focused on what we wanted our students to gain from our services. Our vision and purpose, therefore, inspired aspirations, which guided the rest of the design and informed how our program creates value for others. Free from the "we've always done it this way" thinking and able to express our vision, we let go of what was done in the past and identified new approaches for elevating the areas within our unit. This process

aligned staff vision with other stakeholders' goals and values to create buy-in and acceptance as well as transparency through documentation. Moving forward, we can show how our unit supports institutional goals, such as retention, by identifying our corresponding aspirations to illustrate how our services influence retention efforts. In this way, we can tell the story of how the student experiences we cultivate contribute to the goals and values of the institution.

While we used the VCF to redesign our Course Support Programs unit, we believe the process is transferable to other contexts as well. The Value Creation process fosters a more encompassing approach to program design by first considering stakeholders' experiences and what they gain from those experiences. By focusing on the overall purpose of the program, the intended outcomes are inevitably achieved. Articulating the purpose of the program before recognizing the desired outcomes ensures that all aspects of the program are connected and work together to bring value to all stakeholders. The VCF creates a foundation for program design in a clear, accessible format that can be revised or expanded as visions grow or environments change. By re-working and simplifying the value tables, a clear vision can be communicated to any interested party. The detail captured during the initial Value Creation process can cultivate the development of a systematic assessment plan that takes all aspects of the program design into account. We hope the details of our experience will inform others as they journey through the design and assessment process for their programs.

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Appendices

Appendix A: Value Creation Framework Template

| Immediate Value: How they feel as they develop their toolkit (or when they leave a session) | | | | | |
|---|------------|------------------------------|---------------------|-------------------------------|-----------------|
| Aspirations | Conditions | Risks and Mitigating Factors | Indicators and Data | Activities and Enabling Value | Strategic Value |
| | | | | | |

| Potential Value: What is in their toolkit when they leave a session | | | | | |
|---|------------|------------------------------|---------------------|-------------------------------|-----------------|
| Aspirations | Conditions | Risks and Mitigating Factors | Indicators and Data | Activities and Enabling Value | Strategic Value |
| | | | | | |

| Applied Value: How they use the items in their toolkit outside of their community (a change in practice, expressed as a verb) | | | | | |
|---|------------|------------------------------|---------------------|-------------------------------|-----------------|
| Aspirations | Conditions | Risks and Mitigating Factors | Indicators and Data | Activities and Enabling Value | Strategic Value |
| | | | | | |

| Realized Value: The result of using the items in their toolkit | | | | | |
|--|------------|------------------------------|---------------------|-------------------------------|-----------------|
| Aspirations | Conditions | Risks and Mitigating Factors | Indicators and Data | Activities and Enabling Value | Strategic Value |
| | | | | | |

| Transformative Value: Impact beyond the community | | | | | |
|---|------------|------------------------------|---------------------|-------------------------------|-----------------|
| Aspirations | Conditions | Risks and Mitigating Factors | Indicators and Data | Activities and Enabling Value | Strategic Value |
| | | | | | |

Adapted from Wenger, Trayner, & de Laat, 2011 and Wenger-Trayner & Wenger-Trayner, 2017.

Appendix B: Sample Aspiration for Immediate Value in the Assessment Table

| Immediate Value: How they feel as you develop your toolkit (or when you leave a meeting) | | | | |
|--|--|--|--|-------|
| Aspirations | Assessment Categories | Assessment Items | Implementation/ Timeline | Notes |
| 2) Feel confident that they can study effectively because they leave equipped with study strategies and better understanding of the material | Targeted survey/ focus group Post-visit survey Closing activities End of semester survey | Set up closing activity: <ul style="list-style-type: none"> • 3:2:1 Google Form • Clear point/ muddy point • Write a question for each Bloom's level • "need to develop closing activity" for tutoring • Need to set up documentation plan for both of these End of semester survey: Name strategies and describe how you have applied them | August: have documentation plan for recording closing reflections from students November: end of semester survey administered | |