

## Technology Innovation Grants Call for Proposals

### Funding Initiative: Improving Character Strengths of Adolescents through Technology Innovation

**Up to five \$60,000–80,000 awards for one-year projects**

#### Summary

Baylor University welcomes proposals for the “Improving Character Strengths of Adolescents through Technology Innovation” funding initiative. We aim to support 3–5 technology innovation projects at \$60,000–\$80,000 for 12–14 months, totaling \$320,000 in awards. The Technology Innovation Grants will fund innovative technological or new media product development based on applied positive developmental science. Example products include smartphone apps, video games, and content for new media regularly frequented by adolescents (e.g., youtube, snapchat, Instagram). Awardees will primarily consist of technology and new media designers/developers, but each team will be paired with a scholar consultant. Awardees will design and develop a prototype for a new technological or media product based on science to promote the formation of character strengths in adolescents (i.e., 13-18 year olds). The target character strengths include the following virtues: love, gratitude, hope, patience, wisdom, joy, forgiveness, and generosity. The prototypes will be judged, and one winning product will receive an additional \$150,000 award for further development and marketing. Projects that engage adolescents’ spirituality and transcendent purpose will be viewed favorably. Award winners will attend two conferences: one initial conference, in November 2019 (in Temecula, CA), and one capstone conference in September 2021 (likely also in Los Angeles, CA area) along with grantees from another funding initiative related to character development in youth. Inquiries should be directed to [character\\_intervention@baylor.edu](mailto:character_intervention@baylor.edu). This grant competition is made possible through a generous grant from The John Templeton Foundation, and it is hosted by the Baylor University Psychology and Neuroscience Department.

#### Deadline for Proposal Application

June 1, 2019

#### Timeline and Application Instructions

**Step 1:** Applicants should first review the materials available on UCLA’s Center for Scholars and Storytellers website (<https://www.scholarsandstorytellers.com/tech-character-hub/>) describing the scientific research related to creating interventions for the eight target virtues (love, gratitude, hope, patience, wisdom, joy, forgiveness, and generosity) as well as a general overview of virtue interventions. The technology/media products should develop one or more of these virtues in youth.

**Step 2:** Applicants should submit the following materials:

- A description of the work to be carried out, not to exceed 3,000 words (not including references). The description should include details regarding the product that will be developed, how the product will foster the specific target virtue(s), the target audience, the design process, and the team’s capacity for success.
- A project synopsis of up to 500 words that explains the project and its significance to a popular audience, and which could be published on the grant website, possibly in John Templeton Foundation materials, and included in publicity materials if the proposal is funded.
- A timeline (see template) of project activities.
- A detailed budget (see template), between \$60,000 and \$80,000 in total costs (direct and indirect), with an accompanying narrative (see template) explaining line items, not to exceed two single-spaced pages. **Overhead is limited to 5%**, and funds cannot be used for major equipment purchases. Necessary project-specific costs for lab/space use and administrative support may be included as direct costs and must be justified.

- CV(s) or resume(s) of the project leader.
- Design sketches may also be appended, but are not required.
- Optional: If you have a scholar consultant already working with your team, please describe his/her involvement in 250 words and include a CV.

Technology Innovation proposals must be submitted by email attachment to **character\_intervention@baylor.edu**. The words “Technology Innovation Proposal” should appear in the email subject line. The only acceptable file formats are .doc and PDF. Questions about proposals can be sent to the same address. Proposals must be received no later than **June 1, 2019**. An acknowledgement email will be sent within seven days of receiving the materials.

Applicants from any nation may apply, but products must be developed in English. There are no educational degree requirements. Any minors submitting applications must have an adult co-applicant who can sign legal documents and receive and manage funds. All applications must be submitted in English and all payments will be made in US dollars.

The Project Leader of a funded project must commit to the following:

- 1) Submit semi-annual and final reports, as well as semi-annual and final expenditure reports. The reports should not exceed 2 pages, and should detail the outcomes of the funded project. A template will be provided.
- 2) Attend and engage in workgroups at a conference in November 2019 (in Temecula, CA), which Project Leaders from two simultaneous funding initiatives related to “Character Strength Interventions in Adolescents: Engaging Scholars and Practitioners to Promote Virtue Development” will attend. Airfare, lodging, and onsite meals will be covered and provided by the host team.
- 3) Attend, present findings, and engage in workgroups at a conference in September 2021 (likely also in Los Angeles, CA area), which Project Leaders from two simultaneous funding initiatives related to “Character Strength Interventions in Adolescents: Engaging Scholars and Practitioners to Promote Virtue Development” will attend. Airfare, lodging, and onsite meals will be covered and provided by the host team.
- 4) Consent for their presentation at the final conference to be videotaped and publicly displayed.
- 5) Submit a prototype of a new technology or media product targeting the development of one of the eight target virtues.
- 6) Submit a proposal to Baylor University for additional design/development of the product, including description of additional design and development plans, results from focus group testing, budget for additional funds, and scalability proposal.
- 7) Notify the Project at **character\_intervention@baylor.edu** of all conference presentations, papers, products, and books that arise from the funded research in the final report and four months following the project end date.

**Submissions will be reviewed based upon the following criteria:**

Quality of Design Process  
 Potential impact  
 Fit with program aims  
 Creativity/novelty  
 Capacity to engage target audience  
 Attention to faith/spirituality variables  
 Capacity for success  
 Responsible budget

Award winners’ will be announced August 15, 2019.  
 Grant begins on October 1, 2019.

## Background

Since the late nineties, a panoply of positive psychological interventions that foster character strengths in adults have been developed (e.g., Proyer, Ruch, & Buschor, 2012; Seligman, Steen, Park, & Peterson, 2005; Sin & Lyubomirsky, 2009), but few interventions have been developed or tested for adolescents. The profound physical, cognitive, and social changes associated with adolescence provide a window of opportunity for shaping the habits and moral identity necessary for the formation of virtues (Steinberg & Morris, 2001; Schnitker, Houlberg, Dyrness, & Redmond, 2017). Due to advances in cognitive abilities, adolescents are able to think about the world in more complex ways, intentionally alter their own behavior, and integrate meaningful narratives into their self-identity (Smetana, 1989; Steinberg, 2011). They are also receiving continuous messages from a growing social network (e.g., peers, coaches, youth leaders) that become internalized as a part of their self-concept and influence their habitual behaviors (Steinberg et al., 2006). Thus, there is great potential to influence the development of character strengths during this developmental period.

There have been some successful attempts to develop character strength interventions for youth (e.g., Froh, Sefick, & Emmons, 2008; Gollwitzer, Oettingen, Kirby, Duckworth, & Mayer, 2011), but many more interventions are necessary to provide a sufficient collection of youth-focused character-building activities that can be administered in diverse contexts. Most existing character development interventions are meant to be administered as classroom curriculum or in formal educational settings (e.g., Challen, Machin, & Gillham, 2014; Froh, Miller, & Snyder, 2007; Proctor et al., 2011; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009), and significant strides have been made to promote school-based interventions (c.f., [www.characterlab.org](http://www.characterlab.org)). However, virtue development takes place in a variety of youth contexts, including athletic teams, extracurricular activities, religious organizations, in the home, or even online.

### *Reaching Adolescents in Technologically Mediated Contexts*

As youth spend an increasing amount of time in technologically mediated settings, it is essential that adults begin to capitalize on tech and new media environments to build character strengths. Technologically mediated contexts are ubiquitous for youth today. A study by Common Sense Media found that adolescents in the United States use an average of nine hours of media daily (not including for school/homework; Common Sense Media, 2015). The Pearson Student Mobile 2015 Device Survey reveals that 82% of high school students and 66% of middle school students use smartphones regularly (Harris Interactive, 2015), and other studies have shown that rates of smartphone ownership are not linearly related to parental income (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). Teen boys spend an average of 56 minutes a day playing video games, and teen girls spend an average of 1 hour and 32 minutes on social media (Common Sense Media, 2015). Numerous studies have found negative effects of technology and media use in adolescents. For example, mobile technology has been linked to a decrease in emotional intelligence and empathic abilities (Misra, Cheng, Genevie, & Yuan, 2016; Przybylski & Weinstein, 2013), and video games have long been criticized as increasing aggression (Anderson & Bushman, 2001). Even social media usage has been deemed problematic as research indicates it may breed envy (Krasnova, Wenninger, Widjaja, & Buxmann, 2013), anxiety (Rosen, 2013), and narcissism (Buffardi & Campbell, 2008), and the asynchronous, time-delayed character of social media communication may erode social competencies (Turkle, 2011).

And yet these technologies are not going away, nor are their potential benefits necessarily outweighed by these troubling trends. Our project is predicated on the presupposition that technological advances are powerful forces in our culture, but we want to find productive ways to counter negative trends and use tech for virtue development by capitalizing on the unprecedented levels of engagement and access to young people. Rather than trying to persuade adolescents to turn off their devices (a nearly impossible task) to engage in character development activities, we want to locate character strength interventions where youth are already spending their time—on their screens.

Although social scientists have been using simple, home-grown apps for years to gather data on small sets of research participants, a new wave of user-friendly apps has reached the marketplace, are being widely adopted by a broad audience, and purport to be based on research. However, these apps are primarily focused on self-help and individual well-being, and they neglect goals related to virtue, moral,

and spiritual development. Thus, there is a need for products that combine the best interventions validated by scientific research, a stellar user experience, and content related to virtue and spiritual development to impact the public widely to broaden their spiritual horizons and build virtue.

Several teams have engaged in efforts to use media and technology to increase character strengths and virtues in youth. However, it is often challenging to create technology/media that provides a positive user experience (whereby teens voluntarily engage the product) while also staying true to the science. There are instances where this has been well done. For example, Konrath and colleagues have used the texting feature of mobile phones to increase empathy in young people in Text To Connect (Konrath et al., 2015) and Schnitker and colleagues have created the CharacterMe app to increase patience and self-control. However, many more products could be created that build virtues through scientifically vetted interventions. In technology and media, it is difficult to predict which products will “go viral,” so it would be strategic to more fully saturate the market with scientifically grounded virtue-building products in hope that at least one becomes popularly used by adolescents.

Moreover, few technology/media products targeting character development in youth engage spirituality, transcendent purpose, and broader motivational variables in their implementation. Given our model of virtue development, which proposes that the formation of transcendent purpose as a component of narrative identity is an essential aspect of virtue formation, these products will have limited utility until they engage these variables.

Thus, a major goal of this project is to address the Big Question: *How can new platforms and technology and media be used to promote the development of virtues in adolescents based on science?* We hypothesize that we can promote the development of virtues through technology and media by incentivizing technology/media designers and developers through start-up funds; educating them on the science of virtue development (including the importance of attending to transcendent purpose); pairing designers and developers with scholar consultants; and rewarding prototypes that best engage users with scientifically vetted activities in a funding competition.