

Virginia 4-H and Virginia Tech Use Video Game Design Platform to Engage Teens as Teachers

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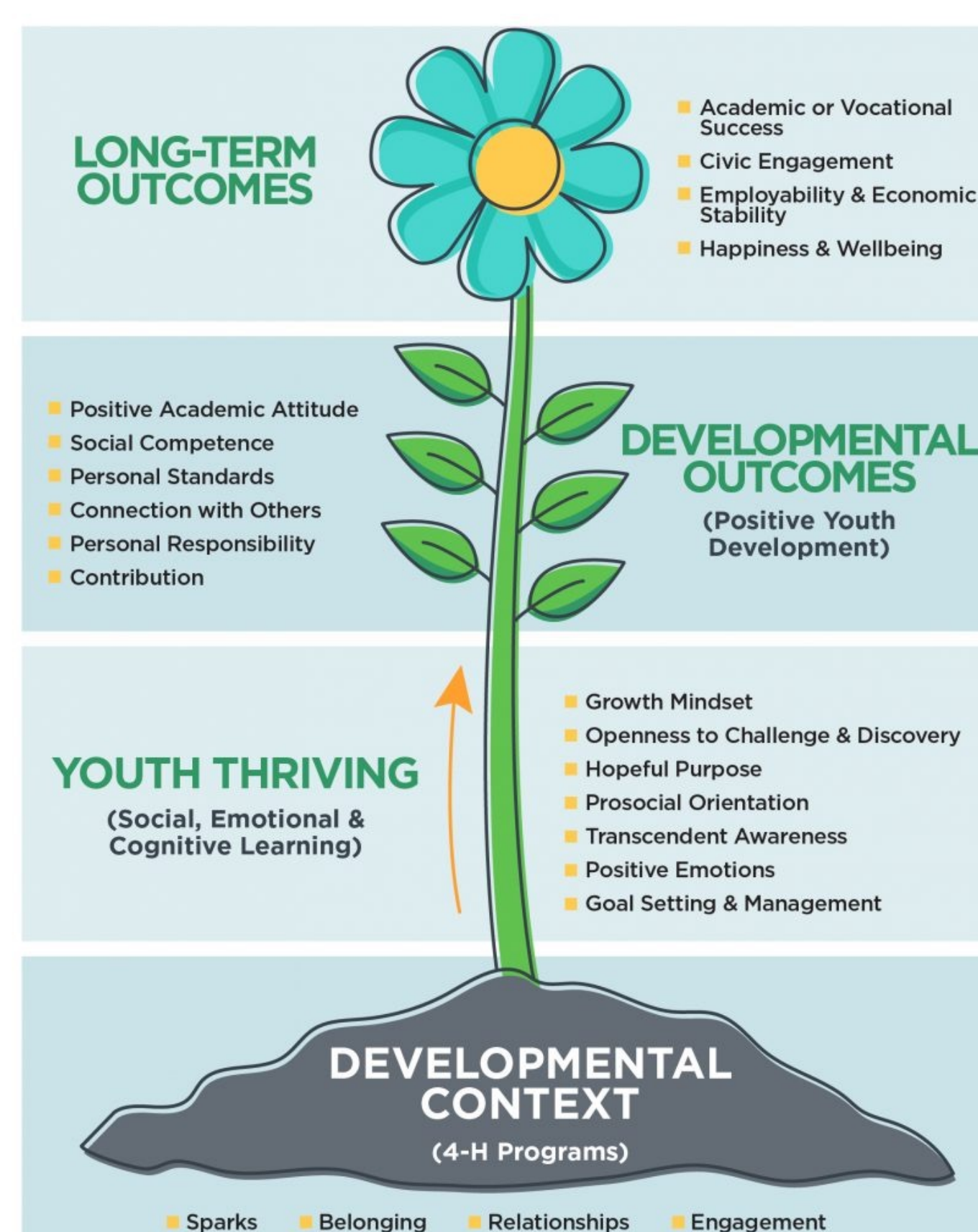
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Abstract

The 4-H Thriving model of positive youth development provides a framework for high quality programs that enable youth to meet developmental and long-term goals by first encouraging them to find their spark. For many youth that spark is technology. In the summer of 2021, Virginia 4-H developed a multifaceted program allowing teens with an interest in technology to explore video game design and develop leadership and teaching skills. Adequately trained teens are effective and innovative teachers. Youth respond well to teen teachers, and teens gain self-confidence and a sense of achievement. Utilizing a network of 4-H agents across the state, teens were recruited to participate in a series of virtual workshops. Virginia Tech professor Dr. Michael Hsiao led two sessions teaching teens to use his Game Changineer video game design platform. A third session, led by 4-H agent Jennifer Bowen and 4-H specialist Dr. Erika Bonnett, taught youth how to design and implement an impactful workshop in their community. Nine teens from six localities (both rural and urban) participated in the Teens as Teachers series. Of these, five went on to lead Game Changineer workshops of their own. A total of 50 youth participated in the teen-led programs. The final component of the program was the implementation of a statewide 4-H video game design contest for workshop participants that garnered 19 entries from across the state. The teens reported positive experiences for both themselves and their workshop participants. One wrote, "This workshop brought kids from all different backgrounds in our community to work together collaboratively." Another explained, "Instructing the students in the workshop helped build my teaching skills. It allowed me the opportunity to explain to students in a clear and concise way how to create games..."

The THRIVE model of positive youth development illustrated in this graphic encourages youth to **find their spark** and provides a structure for programs that help youth reach developmental and long-term outcomes. The summer 4-H Teens as Teachers program allowed youth whose spark is technology to use their voice and develop leadership and teaching skills.

<https://helping-youth-thrive.extension.org/>



Relevance

Positive Youth Development

4-H Positive Youth Development (PYD) models including the Thrive Model, recognize the importance of positive relationships between youth and adults. Quality 4-H programs provide opportunities for youth voice and leadership.

Teens as Teachers

The University of California outlined some of the benefits of teens-as-teachers programs stating that, when adequately trained, teens are effective and innovative teachers. Youth respond well to teen teachers and teens gain self-confidence and a sense of accomplishment. These benefits are often magnified in youth and teens living in high-risk environments. (<https://4h.ucanr.edu/Resources/Teens-as-Teachers/>)

Technology as a SPARK

In the Thrive Model, a spark is a passion that provides energy, joy, purpose and direction. For many youth people, technology is that spark. Technology-based programs lend themselves well to the virtual platform. Utilizing Zoom, Virginia Tech and Virginia 4-H were able to reach out to youth from across the state and bring them together virtually for training.

Response

Virginia 4-H partnered with Virginia Tech Professor Dr. Michael Hsiao to offer a multi-faceted video game design program during the summer of 2021 that empowered teens to serve as teachers.

Teen Training Component

Teens participated in a series of three workshops. Two were led by Dr. Hsiao during which participants learned to use the Game Changineer Platform. A third workshop, led by Dr. Erika Bonnett and Jennifer Bowen, walked teens through the process of planning and implementing their own workshops.

Teen-Led Workshop Component

Participants were encouraged to work with Extension Agents in their localities to plan and implement either face-to-face or virtual Game Changineer workshops. A stipend was provided for youth who offered a class.

Video Game Design Contest Component

A statewide Game Changineer video game design contest was offered. Youth workshop participants were encouraged to enter for a chance to win prizes in three age categories.

Results

Nine teens from six localities (both rural and urban) participated in the Teens as Teachers workshop series. Of these, five went on to lead Game Changineer workshops in their communities. Four teens initiated partnerships with organizations in their localities to host their workshops. A total of 50 youth participated in the teen-led programs. There were 19 entries in the state-wide video game design contest.

"Instructing the students in the workshop helped build my teaching skills. It allowed me the opportunity to explain to students in a clear and concise way how to create games because of the limited time in the workshop. In this manner, I was able to teach each student effectively in a class of eight and answer each of their questions." - J.D. Rimon, 16

"This workshop brought kids from all different backgrounds in our community to work together collaboratively. This goes to show how technology & educational programs, such as GameChangineer, can bring people together, even kids... What truly impressed me as well was the number of girls who participated in the program (11 girls, 9 boys)!! Not only is this program impacting the collaboration between boys & girls, but also encouraging more girls to get into STEM." – Sophia Crowder, 16



Mecklenburg County 4-H'er Sophia Crowder helps a workshop participant use the Game Changineer video game design platform during a workshop held at the R.T. Arnold Public Library in South Hill, VA. Sophia was awarded the Virginia 4-H Youth In Action Award in STEM.