Closing the Gap with YAP: Utilizing YAP to Help Minimize an Achievement Gap

University of Kentucky

Mallory E. McDonald
307 Garrigus Building
Lexington, KY
mallory.mcdonald@uky.edu
859-257-7588

Hunter Anne Julian
309 Garrigus Building
Lexington, KY
hunteranne.julian@uky.edu
859-257-7588

Dr. Stacy K. Vincent
306 Garrigus Building
Lexington, KY
stacy.vincent@uky.edu
859-257-7588

Caleb M. Hickman
309 Garrigus Building
Lexington, KY
caleb.hickman@uky.edu
740-358-1159

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Introduction/Need for Research

The educational achievement gap is an area of research that has been extensively investigated relating to disparities in test scores, advanced course enrollment, and college graduation among marginalized youth for decades (Barton, 2003). Further limitations exist in understanding the achievement gap among *coal mining youth* in rural communities. The researchers use the term *coal mining youth* to describe students in secondary education who have grown up in coal mining communities. In coal mining communities, factors beyond high poverty rates widen the achievement gap compared to their non-coal mining counterparts (Partridge et al., 2012). The social environment surrounding coal mine youth creates a difficulty to obtain a bachelor's degree because of the lack of support for higher education (Brown et al., 2009).

In Kentucky agricultural programs, students who complete all courses in a career pathway are assessed through the Kentucky Occupational Skills Standards Assessment (KOSSA) (SDE, 2021). The pass rates correlate directly with the amount of Perkins funding received for the agricultural programs, while students who successfully pass the KOSSA receive college credit to Kentucky colleges and universities (KDE, 2020). Even with the challenges coal mining communities face, agriculture educators in mining communities have students passing the KOSSA at high rates, despite many of their students not wanting to pursue post-secondary education. The teaching practices of these educators align with the elements found in Youth-Adult Partnerships (Zeldin et al., 2012), being especially consequential for youth living in low-income circumstances. Research is limited relating to this model's use in school settings and even less with coal mining youth (DuBois et al., 2002).

Theoretical Framework

The goal of YAP is shared control between youth and adults that provides a social arrangement shown as ideal for both empowering youth and community development (Wong et al., 2010). To be successful, YAP needs citizens across generations working together to address common concerns that healthy communities and organizations are dependent on the voluntary contributions of their members (Zeldin et al., 2012). YAP breaks down into four core elements: Authentic Decision Making (ADM), Reciprocal Activity (RA), Natural Mentors (NM), Community Connectedness (CC) (Camino, 2000). Youth-Adult Partnerships, specifically with RA, foster a relationship through the work being done to reach a common goal creating a sense of group solidarity (Kirshner, 2009; Libby et al., 2005). Community Connectedness is the adult connecting youths to community networks. The connections formed through YAP can translate into opportunities for scholarships, awards, internships, and employment among low-income and minority youth (Jarrett et al., 2005).

Methodology

Face-to-face interviews occurred with 12 teachers selected based on performance of their students pass rate on the [S]OSSA, in the 50th percentile or higher in the overall state average, and teaching in coal mining communities. The interviews resembled guided conversations rather than structured queries. Rubin and Rubin (2011) believed that the actual stream of questions in a study is likely to be fluid rather than rigid, also referred to as "unstructured interviews" (Weiss, 1994, p. 207-208).

After the interviews, the research team transcribed these interviews. Team members studied the four core elements of YAP and their defining characteristics through a concept-driven coding process (Saldana, 2016). The coding process followed Saldana's (2016) framework, and the YAP theory allowed the researchers to code for themes. The researchers

utilized a codebook (Creswell & Creswell, 2018), and all researchers participated in the coding process. The researchers maintained an intercoder reliability score of 78.4%, which is deemed acceptable (Morrissey, 1974).

Results/Findings

Evidence of ADM became present when teachers discussed how they empower students in the classroom. One teacher discussed the student selected leadership opportunities in their greenhouse class, "I have students select a greenhouse manager. They chose based on their skills." Another teacher implemented a similar approach to agriculture mechanics, "In the shop, we have crew leaders who are student selected." The element of RA was seen when teachers, not born in coal mining areas, had to learn about the coal industry, "act interested and want to listen about something new, it gives the kid a talking point and makes them an expert. They feel like they're helping you." Another teacher echoed, "work with your kids instead of alienating them." NM was the most abundant element, with every teacher providing multiple examples of how they are a mentor to their students. One quote that stood out from the rest "A lot of [students] come back and ask me for advice, they want to talk and get your idea about what is going on. They want your approval because they look at [agricultural science teachers] differently than their other teachers." CC is an element that teachers demonstrated by bringing the community to their classrooms, "the best thing to do is have people whether it's the engineers or foremen, whoever come into the classroom and talk to the kids." Or, as another teacher stated, "When you bring [community members] in, kids listen more than a dad or an uncle talking to them."

The interviews revealed the concept of relationship and rapport building between the student and teacher. Specifically, building relationships with students starts in the community was vital to impact agricultural science programs. "These children don't value money because they have lived without it for so long. They value relationships because they understand, and they've been taught since a very early age that I'm never going to have enough money so, therefore, my relationships, for me, are more important."

Conclusions/Recommendations/Impact

Educators indicated high markers of YAP's elements to develop a program atmosphere of empowerment which enhanced student learning and engagement resulting in higher pass rates of the KOSSA exam. Recommendations for future research are to expand this study to include students of teachers interviewed to gain the students' point of view on the elements of YAP. Additionally, YAP's impact should be further studied to assess its effects on other underserved populations, especially within secondary education settings. As limited research has shown, YAP is present and already utilized in secondary agriculture education programs which is why it is recommended for educators to become more aware of their practices using this model to serve students more purposely using YAP's elements. The researchers encourage educators to utilize YAP as a methodological tool to enhance the educational experience of youth from similar cultural backgrounds in order to close an ever-growing academic achievement gap through agricultural education.

References

Barton, P. E. (2003). Parsing the achievement gap: Baselines for tracking progress. Policy Information Report.

Brown, R., Copeland, W.E., Costello, J., Erkanli, A., & Worthman, C.M. (2009). Family and community influences on educational outcomes among Appalachian youth. *Journal of Community Psychology. 37*(7), 795-808. doi:10.1002/jcop/20331

Camino, L. (2000). Youth-adult partnerships: Entering new territory in community work and research. *Applied Developmental Science, 4*(1), 11–20. doi:10.1207/S1532480XADS04Suppl_2.

Creswell, J.W., & Creswell, J.D. (2018). Research Design: Qualitative, quantitative, and mixed methods approaches (5th ed). *Sage Publications*.

DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A metaanalytic review. *American Journal of Community Psychology, 30*, 245–270. doi:10.1023/A:1014628810714.

Jarrett, R. L., Sullivan, P. J., & Watkins, N. D. (2005). Developing social capital through participation in organized youth programs: Qualitative insights from three programs. *Journal of Community Psychology, 33*(1), 41–55. doi:10.1002/jcop.20038

Kirshner, B. (2009). "Power in numbers": Youth organizing as a context for exploring civic identity. *Journal of Research on Adolescence, 19*(3), 414-440.

Libby, M., Rosen, M., & Sedonaen, M. (2005). Building youth-adult partnerships for community change: Lessons from the youth leadership institute. *Journal of Community Psychology, 33*(1), 111-120. https://doi.org/10.1002/jcop.20037

Morrissey, E. R. (1974). Sources of error in the coding of questionnaire data. *Sociological Methods and Research,* 3(2), 209-232.

Partridge, M., Betz, M., & Lobao, L. (2012). Natural resource curse and poverty in Appalachian America. *American Journal of Agricultural Economics*. *95*(2), 449-556. doi: 10.1093/ajae/aas086

Rubin H. J. & Rubin I. S. (2005). Qualitative interviewing: The art of hearing the data. (3rd Ed.). *SAGE.*

Saldana, J. (2016). An introduction to codes and coding. (3rd ed.). *The coding manual for qualitative researchers* (pp. 1-30). Sage.

Kentucky Department of Education. (2021). *Perkins v approval and non-approval expenditures*. https://education.ky.gov/CTE/perkins/Documents/ApprovableandNonapprovableexpenditures.pdf

Kentucky Department of Education. (2020). *State articulation agreements.* https://education.ky.gov/CTE/ArtAgree/Pages/default.aspx

Weiss, R. S. (1994). Learning from strangers: The art and method of qualitative interview studies. *Free Press*.

Wong, N. T., Zimmerman, M. A., & Parker, E. A. (2010). A typology of youth participation and empowerment for child and adolescent health promotion. *American Journal of Community Psychology, 46*, 100–114. doi:10.1007/s10464-010-9330-0.

Zeldin, S., Christens, B.D., & Powers, J.L. (2012). The psychology and practice of youth-adult partnership: Bridging generations for youth development and community change. *American Journal of Community Psychology, 51*, 385-397.