Newfound Belonging: Reimagining Youth Development Through Culturally Relevant Physical Activity and Literacies

Brittany Pinkerton
bpinkerton@augusta.edu

Christine L. Craddock
Delaware State University, ccraddock@desu.edu

Newfound Belonging: Reimagining Youth Development Through Culturally Relevant Physical Activity and Literacies

Brittany Pinkerton
Christine L. Craddock

Introduction

Culturally relevant pedagogy (CRP) has been a widely utilized framework for educational practice and research (Ladson-Billings, 2014). It is built on the ethics of care, first established in consideration of education among Black youth (Ladson-Billings, 1995). However, applications of CRP to youth physical activity (PA) programs are largely unexplored and limited to preservice physical education (Shiver et al., 2020). We posit the academic success, cultural competence, and critical consciousness outlined in CRP are not only plausible to integrate into PA programs but necessary for holistic youth development. Further, though youth activity programs often focus separately on physical health, literacy development, or mathematical support, innovative models with intentional combinations of these practices merit further consideration and exploration (Fredrick et al., 2020; Pinkerton & Craddock, 2024).

In this article, we outline a free PA program designed for youth participants at an urban university literacy center housed in a larger community center. Our goals were to provide PA sessions that incorporated multiple literacy practices through game-based exercises and cooperative activities. Following an asset-based approach aligned with positive youth development (PYD), we endeavored to engage students through positive interactions with PA in our program in efforts to build youth's confidence, self-efficacy, ownership, and cultural competence with multiple literacies. This focus is grounded in key aspects of PYD and CRP. For many of these participants, their experiences with school-based literacies were not always affirming. We hoped to provide a safe, welcoming space that promoted inclusive, equitable access for diverse youth to engage with PA and literacy practices in critical, authentic ways relevant to their identities.

First, it is important to note (and will be clarified further in the research framework) that contemporary literacy research frequently uses the terms *literacies* or *literacy practices* to describe a large range of text-based, oral, physical, written, and reading practices that occur through multiple contents, contexts, and modes. Thus, describing how to juggle a soccer ball, or discussing how to divide ten snacks equally among individuals, or responding to a journal entry by writing and drawing all represent valid *literacy practices* or *multiple literacies*. These conceptualizations are especially relevant to our program. At the same time, the term *literacy* is often used and recognized in broader fields to denote purely text-based reading and writing. This was also a focus of development for youth in our sessions through spelling, phonics, and more traditional, text-based tasks.

Further, we draw from one existing framework already used in PYD programs known as the Teaching Personal and Social Responsibility (TPSR) model, which utilizes PA and an asset-based approach to promote life skills and comprehensive youth development (Hellison, 2011). Such life skills include respect for self and others, self-control, effort, caring, and helping others. Our aim was to build from this model by capitalizing on key tenets of CRP and TPSR as related frameworks for promoting holistic health including academic achievement alongside physical, social, and emotional well-being. Since TPSR traditionally serves marginalized youth, incorporating CRP may offer a bridge between the possible cultural divides of leaders and youth.

Accordingly, we detail the initial findings of our program as part of an ongoing research study exploring the following questions:

- What is the nature or role of multiple literacies in facilitating PA utilizing CRP?
- In what ways do youth's experiences with TPSR and CRP facilitate changes over time in their engagement with PA and multiple literacies?

We proceed by reviewing theoretical frameworks surrounding CRP and youth development through TPSR; we also briefly define and clarify (with salient literature) the multimodal and disciplinary literacies utilized in our program. This is followed by an overview of our methodology including program and study design with participants and data sources, followed by emerging themes from the data analysis of our pilot semester. Finally, we end with discussion and broader implications of these findings for youth development.

Theoretical Frameworks and Literature Review

The CRP framework consists of three key tenets, which include (1) academic success, (2) cultural competence, and (3) critical consciousness (Ladson-Billings, 1995). The notion of academic success includes holistic development and success of youth beyond (but not discounting) school grades and assessments (Ladson-Billings, 2014). Cultural competence describes a capacity to bridge cultural dissonance between both students and teachers, creating relevant content for students that fosters engagement and interest. Lastly, critical consciousness uses intentional pedagogy to cultivate constructive conversations and problem-solving toward social inequities (Ladson-Billings, 1995). Through CRP, Ladson-Billings places the onus of effectively teaching and guiding youth through school upon the instructor. Overall, CRP embodies an integrative developmental approach to youth in educational settings.

PYD is another holistic framework for youth development used in traditional educational settings and beyond. At times, youth development programs can adopt a deficit-based or a risk-reduction approach (Benson, 1997); conversely, PYD prioritizes strengths-based or asset-based applications to holistic youth development (Damon, 2004). Many PYD programs take place before, after, or out of school, and some PYD concepts have been applied to sports and PA contexts.

One specific model that employs a PYD application to sports, PA, and physical education is TPSR. This model was originally created in a physical education setting that served marginalized youth. TPSR embraces a values-based or life-skills approach while also instilling these same values into the leaders of such programs. For instance, research demonstrates that activity leaders who take ownership of program planning and prioritize participant relationships can experience better behavior management and more effective programming (Ivy et al., 2018). TPSR assumes the leader believes in prioritizing youth, human decency, and holistic self-development (Hellison, 2011). Additional values and life skills embedded into TPSR programs include respecting the rights and feelings of others, effort, cooperation, self-direction, leadership, and transference of skills outside the activity context.

Though the inherent design of TPSR aligns with CRP, there can be notable shortcomings when they are integrated (Pinkerton & Martinek, 2022), largely because considerations for race, multiculturalism, and ethnicity are generally missing from PYD models (Benson et al., 2006; Fredricks & Simpkins, 2011). Limited research explores TPSR programs that address marginalization of youth due to race, ethnicity, gender, and social inequities (Walsh & Wright, 2016), which prompts our investigation into TPSR programming that integrates CRP. In uniquely combining these frameworks, we explore and suggest ways to comprehensively support otherwise marginalized youth in multiple aspects vital to their overall development. Ideally, through these efforts, youth can feel empowered with the agency to participate in programs that foster development in themselves, relationships, academic-content literacies, and other contexts (including school, home, and community).

Accordingly, we draw upon key areas of literacy research to explore this holistic youth development through integration of CRP, TPSR, and multiple content areas including PA, mathematics, and literacy. Firstly, the program's interdisciplinary approach naturally involves both disciplinary literacy practices and applications of content literacy. Disciplinary literacies encompass the authentic and particular ways of thinking, reading, writing, speaking, and doing in disciplinary contexts and careers (Shanahan & Shanahan, 2017). For example, a nutritionist has specific disciplinary literacies they use in realistic practice that are different from a chemist, a personal trainer, an engineer, and so on. On the other hand, content-literacy research posits there are also more generalized literacy practices and instructional strategies that can promote literacy across content areas (Taylor, 2018). Interestingly, to ensure fidelity to both CRP and TPSR, the activities in our PA program reflect applications of both disciplinary and content-literacy practices. This is because we endeavor to foster and scaffold multiple literacies while making activities relevant and authentic for youth.

We arrived at the use of multimodal literacies as an innovative lens for combining these multifaceted frameworks and goals. Multimodal literacies encompass the way individuals represent, communicate, or make meaning through multiple modes including speech, text, gestures, images, colors, sounds, signs, and symbols (Stein, 2008). Thus, the separate disciplines of physical education, mathematics, and literacy instruction are each innately multimodal (Arzarello & Robutti, 2010; Chandler-Olcott, 2017; Daher, 2014; Freeman et al., 2016). Nonetheless, not all educators recognize the value or nature of multimodal literacies and their capacity for cultivating CRP with youth (Taylor, 2018). Similarly, though multimodal literacies can be used for interdisciplinary instruction in multiple content areas, there is a dearth in research of their applications with PA (Chandler-Olcott, 2017; Craddock, 2022; Hill, 2014).

Methodology and Program Design

We recruited youth from an urban university literacy center housed in a larger community center that is situated between two historically low-income neighborhoods in the southeastern United States. The overall study design utilizes qualitative case studies of participants to describe and interpret a social context naturally and holistically (Glesne, 2016). Our methodology reflects a framework of "inquiry as stance," which emphasizes researcher reflexivity, critical inquiry, and multiple sources to ensure trustworthiness in data (Cochran-Smith & Lytle, 2009).

Participants and Data Sources

Youth voluntarily attend the literacy center and are referred to the center by schools based on the need to develop their traditional, text-based literacy abilities with reading and writing. We offered informational sessions to parents and guardians at the literacy center and then onboarded participants through consent and assent forms. Because each participant offers interpretations and experiences best understood through detailed description, this article includes purposive sampling of only three focal participants (Creswell, 2014). Participant descriptions can be found on table 1 (pseudonym codes provided).

Table 1. *Participant Demographics*

Participant	Gender	Age	Grade	Race
A	Female	10	4	Black
B	Male	8	2	White
F	Male	9	4	Black

The program was offered two days per week for thirty minutes per session. Each session followed the TPSR format consisting of relational time, discussion of a life skill or value, PA, closing discussion, and reflection. Embedded into the TPSR model is the concept of voices and choices, which involves responding to, and adjusting, sessions and activities with various equipment based on informal participant feedback. Since this article reviews the first semester of the program's implementation, we were the sole program facilitators as university professors and coresearchers, one with experience as a literacy and mathematics teacher-educator and another in kinesiology. The average session attendance had humble beginnings of about four participants.

Figure 1 includes a sample outline of one activity plan (unique to each day/session) centered around various physical and academic literacies. This example provides a general structure for one particular session with the flexibility to adapt or change as participants or facilitators made adjustments for engagement and participation. This openness to change embodies aspects of both TPSR's voices and choices and the cultural competence of CRP that prioritizes the notion of coconstruction of knowledge between instructors and students.

Tuesday 2/21

Word of the day — Caring/Caring for others
- Splitting reps in half or helping each other with completing the physical activity tasks.
- Participants select the activities we do based on those written on the poly spot.

Partner activites to include:
- Partner rowing
- Partner sit and reach
- Partner sit to stand
- Partner relay run back and forth across the room
- Partner plank high fives
- Partner squat (you-go-Igo)
- Steppingstones — letters in a lake must make a word to get across the "lake" of poly spots spread across the floor

Journal Entry Prompt: How did you help someone today? Or what did you do to help someone today?

Figure 1: Sample Activity Plan

Also included in figure 1 is a sample "Word of the day" that would have been discussed first during relational time and the physical warm-up. The word would have also been revisited for the last five minutes when we ended sessions with the journal prompt developed by facilitators. These discussions and journals were the primary way we cultivated the social interactions and cultural competence relative to TPSR and CRP, respectively, which both require building relationships and an understanding of student identities. Moreover, they were meant to promote the transference of life skills and critical consciousness of TPSR and CRP, again respectively, through introducing and interrogating these values as parts of youth's lives and social contexts of school, home, and community. Finally, some examples of equipment used to facilitate activities are represented in figure 2.

Figure 2. Program Equipment

As data sources, we collected the participant journal entries at the end of each session. A TPSR implementation checklist was completed once per week to analyze and ensure program fidelity. Observations and reflections were documented after each session noting interactions among participants, facilitators, and literacies (e.g., math, reading, writing, and physical). At the end of the program a focus group interview was conducted in person with two participants and was recorded and transcribed via Zoom. These sources are summarized in table 2.

Table 2. *Data Sources Collected*

Data Source	Format of Data	Number of Sources
Participant journal entries	Written text images	27
TPSR implementation checklist	Printed text	7
Field note observations	Printed text Written text images	15
Focus group interview	Audio recording transcript	1

As can be seen in the table, biweekly TPSR implementation checklists (see appendix A) were completed by the one facilitator (teacher education professor) after a session that was initially planned and designed by the other facilitator (a kinesiology professor). This helped evaluate adherence to the TPSR format throughout the program. Similarly, the field note observations were completed by both facilitators separately after sessions. These served as guiding reflections toward continually developing activities (that included participant feedback) while exploring and noting the role (and improvable aspects) of facilitating CRP.

Data Analysis

All data sources were stored in a password protected online cloud folder. They were uploaded and coded using NVivo. A social semiotic multimodal framework was used to analyze the data in relation to social context (Kress, 2010). We incorporated multimodal analysis suggested by Kim and Kim (2016) who utilized Halliday and Hasan's (1989) analysis of language according to field (topic of interaction), tenor (relationships in interaction), and mode (modes used during interaction). With field, tenor, and mode as a frame, we analyzed and coded all data sources. Codes were generated using an inductive approach, leading to a second cycle of coding, eventually suggesting pervasive themes (Saldaña, 2009).

Findings

Our initial findings reflect authentic ways participants expressed themselves and engaged with the activity program. Themes that indicate a complex, yet compelling, cycle may be key to facilitating this engagement that begins with belonging, leading to interaction, then reciprocity, and finally, evolution/empowerment.
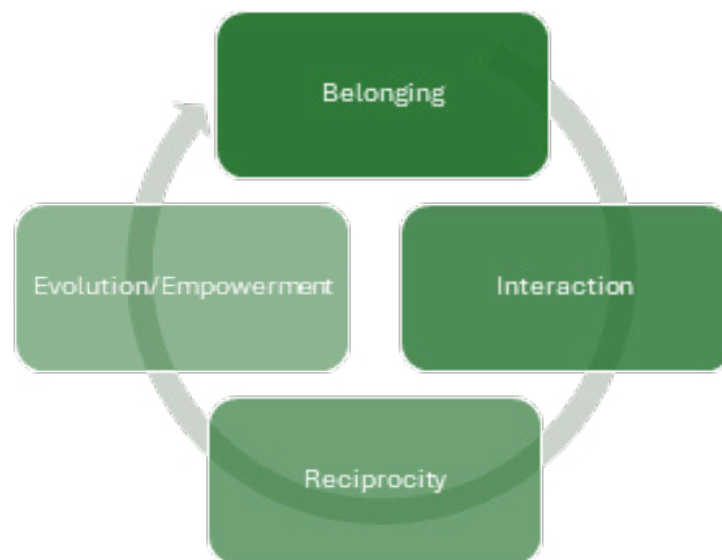

Figure 3. A cycle reflecting possible outcomes for youth engagement

Clarifying the meaning of each component in this cycle is best described through four primary ways participants engaged in the cycle as revealed by the data. These four areas will be detailed as sections that include engagement and expression with the facilitator, each other, content areas, and other contexts. We will also suggest limitations in some of these areas for how the cycle can be better facilitated.

Engagement and Expression with Facilitator

Integrating TPSR and CRP naturally promoted youth expression and relationship-building with facilitators of the program. This assisted in creating community and a sense of *belonging* among participants. Community and belonging were evident on days even when one participant, F, was unable to attend the program due to literacy-center tutoring; he frequently made sure to come say "hi" to program facilitators at the center and give them each a hug. Additionally, participants often expressed they were not ready to leave when the program ended, so sessions sometimes went over the allotted time. Belonging was fostered through intentional *interactions* between facilitators and participants, particularly at the beginning of each session embedded into the relational time of the TPSR format. F's journal entry illustrates how he valued facilitators and was open to asking for help when spelling on the poly spots as drawn.
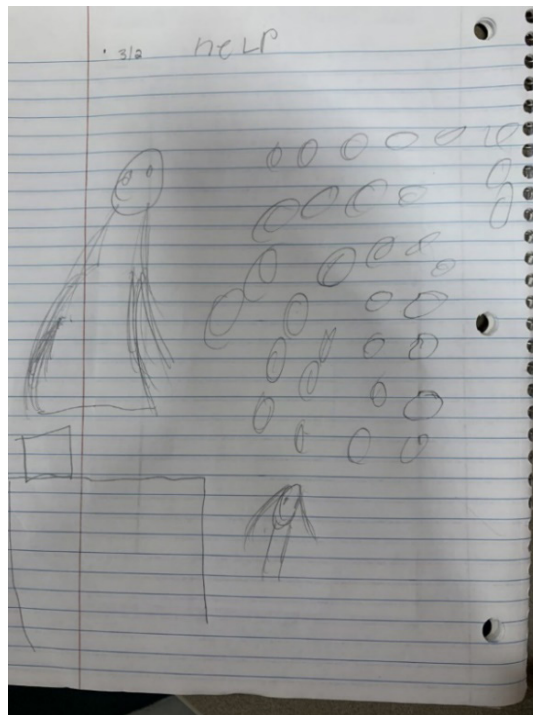

Figure 4. F's journal entry portraying *help* in participant-facilitator interactions

While F's interactions often centered positively around the facilitators, one participant, B, candidly noted facilitators sometimes made him feel like he was still in "school mode." He preferred game-like activities. This led us to develop more of these tasks for participants in response to his feedback. Initially, activities did not involve self-comparison or have timed restrictions. However, we eventually incorporated game-like activities that added some combinations of time constraints, goal setting, or a self-comparison factor, without explicit competition for a winner.

Despite instances of "school mode," B and other participants were eager to invite the facilitators to partner with them in physical activities and direct the facilitators what to write on the projection board. Once a sense of safety and respect was established within relationships like this, *reciprocity* emerged as youth shared their interests and facilitators responded by adjusting program activities to be relevant to their requests. Inherent to TPSR is allowing youth to express voices and choices; implementing this approach *empowered* youth's ability to *evolve* and guide the program's activities and content. This furthered a sense of ownership, cycling back to fostering a sense of belonging.

Engagement and Expression with Peers

In building a sense of trust and community, creating opportunities for youth to engage with one another was deliberately implemented through activities. Such activities incorporated the values promoted through TPSR, namely teamwork, helping, and caring. Partner physical activities were also used, including partner sit-to-stand and partner rowing. The dynamics between participants initially began through facilitator-led exercises to become more participant-initiated. Once a sense of safety and *belonging* amongst participants was established, they began *interacting* together on their own. This was observed when participants helped and encouraged one another to spell words, complete mathematics equations, finish challenging sets of laps or exercises, and get equipment for one another. During relational time, B shared the personal toy he brought with F over the course of multiple sessions. Additionally, during relational time, B and F bonded over characters they read about in a book series.

As portrayed by A in a journal entry, friends were a highlight of her day. Though she was absent from our focus group to confirm whether she wrote about peers from the program or at school, A felt comfortable sharing and reflecting on the importance of interactions with friends. There is room for progress to nurture participant relationships with one another to promote more *reciprocity* between them specifically. Thus, this area of data illustrates a need to further explore how a sense of *evolution/empowerment* in peer and social interactions can be better facilitated.
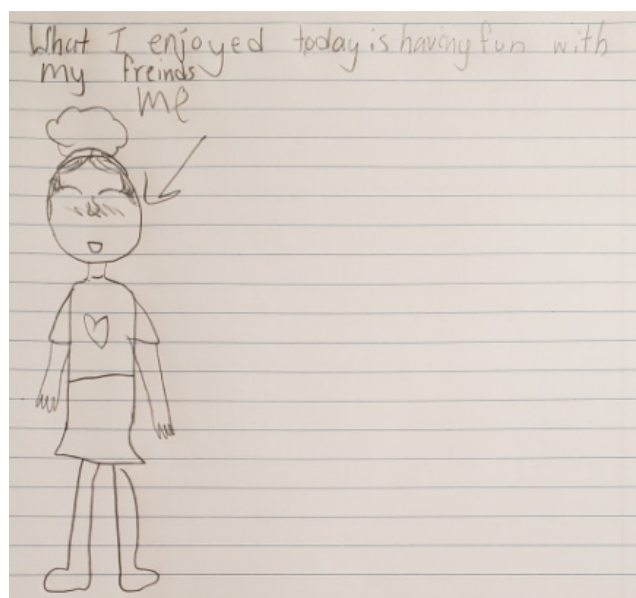

Figure 5. A's journal entry about friends

Engagement and Expression with Multiple Content Areas

We intentionally utilized multimodal literacies and CRP to engage students with multiple content areas including physical and mathematical disciplinary literacies. In other words, we hoped participants would recognize that PA, mathematics exercises, and literacy practices do connect and *belong* together when facilitated in authentic and relevant ways. This centered around providing opportunities for participants to *interact* with these literacies cohesively in activities that included YouTube videos involving physical exercise or dance with mathematical computations or sight words. Other examples included games like, "musical poly spots," where participants jump between colorful spots with numbers, letters, exercises, and character traits. Depending on where students land, facilitators would come up with mathematical or reading exercises to complete with the unique combinations. Over time, these interactions also began to

demonstrate *reciprocity* between content areas and their literacies. To elaborate, developing multimodal literacy in mathematics also engaged participants with their similarities in multimodal representations of physical literacy and promoted engagement and self-efficacy overall in literacy abilities. This ideally instills an *evolutionary* perspective on literacy engagement in these multiple content areas, *empowering* students to have confidence in their academic success across disciplines by seeing their relevance to each other.

Figure 6. A sequence of multimodal slides showing connections between multiple content areas

One specific example comes from a series of activities based around caring and sharing. The activities progressed using materials to practice spelling words that related to caring using bean bags, along with dividing physical exercises between participants to "share the load." The images, discussions, journaling, physical exercises, and game-like play with equipment demonstrated meaningful connections between the disciplinary literacies by spelling words, computing, dividing sets into repetitions, writing, and completing physical tasks all related to one another through a theme. For example, the division of the circles into five equal sets of three demonstrates how we divided fifteen push-ups by five people and completed three each. Similarly, the set of rainbows is a multimodal representation of dividing sixteen lunges in half (eight per leg).
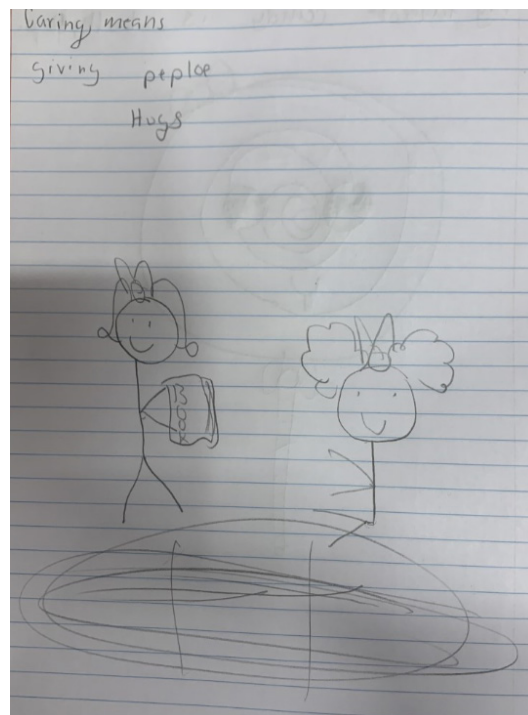

Figure 7. A's journal about caring

A's journal (figure 7) also highlights this same value of caring through connections between contents with multimodal literacies. She wrote how caring means giving others hugs through written text, but also drew an image of someone sharing a book with another person. This reveals her multimodal expression of belonging and interaction, while also illustrating the reciprocity of literacy content and sharing books as something she relates to the concept of care.

Engagement and Expression with Life skills and Other Contexts

The use of multimodal literacies with PA as framed by TPSR allowed multiple instances for participants to recognize values and life skills that we discussed and related to their lives both in and outside of the program. Because we began and ended sessions with oral and written discussion about life skills like self-control, responsibility, effort, caring, and self-respect, participants integrated these aspects of the program as an anticipated part of our activities that eventually *belonged*. We intentionally incorporated activities that might provide further *interaction* around the words beyond the formalized beginning and end of sessions. For example, if the word was effort, we might promote and articulate this word throughout the session, encouraging participants to give 100 percent in exercises or not give up on a hard math computation or spelling activity. Similarly, in ideal instances, participants might suggest their own applications or associations of the words to the facilitator, the activities, or each other, which revealed *reciprocity* in their participation with these values. In other words, we hoped to see give-and-take in terms of participants' understandings of the words and their personal meanings rather than imposing a set definition or interpretation of its significance to them. Ultimately, this led to *evolution/empowerment* with these skills into contexts and circumstances beyond our program, though we admit the need to continually develop these extensions and possibilities with intention.

One specific instance of this was demonstrated through an interaction we had with our participant, F, who told us in our beginning relational time how he enjoyed watching WWE wrestling. In figure 8, the slides display our life skill for the day: respect; but the sequence of activities, exercises, and conversations also began to integrate his interests, identity, and connections to how wrestlers might train in ways similar to our activities.

Figure 8. A sequence of multimodal slides depicting engagement with life skills

Notably, a word from prior days also resurfaced with the concept of *effort* when we multiplied and divided multiple sets of push-ups, squats, and lunges to complete together to become "strong like the wrestlers." We also discussed respectful ways to interact with air punches and kickboxing exercises.

Discussion and Implications

In our exploration of integrating multimodal literacies with PA through CRP, we reinforce the notion that diverse forms of literacy complement one another. The program demonstrates dynamic, noteworthy intersections in what are considered traditional literacies with discipline specific literacies (in this case between mathematics, reading, writing, and physical literacies). This confirms the need to intentionally plan programs informed by the belief that multiple literacies do, in fact, belong together in youth development.

Furthermore, CRP is central to this planning of authentic content that is meaningful and engaging to participants. Specifically, with PA, the use of TPSR enhanced our ability to be culturally relevant. This is demonstrated through the cyclic themes of belonging, interaction, reciprocity, and evolution/empowerment. We aimed to provide spaces, places, and diverse, multimodal "texts" to facilitate belonging and interactions for participants with other people and multiple content areas. This challenged typical paradigms of instruction to include reciprocal participation in terms of leading and teaching one another through multiple relevant literacies, negotiating authentic connections, and eventually evolving into empowered engagement, learning, and development.

Both the reciprocity and empowerment stages of the cycle are ones we hope to improve through further implementation of the program, as we feel they propel the cycle onto further stages of development and deeper understandings of cultural competence with critical consciousness (Ladson-Billings, 2014). However, the overarching impact of belonging as the start of our emerging cycle is paramount to the program and not to be dismissed. Creating a sense of belonging is necessary for sustainable impact (Armour et al., 2013) and continues to be an essential feature of PYD programs (Eccles & Gootman, 2002). Thus, our findings further illuminate the central need for cultivating belonging at the heart of any classroom, program, or context for youth development. Without this piece, we assert the rest of the cycle loses its potential, power, and possibilities in multiple settings, content areas, and literacy practices.

These considerations also lead us to propose a model illustrating our participants belonging at the center sweet spot of multiple content areas in the foreground, backed with CRP, navigated by the vehicle of multimodal literacies (labeled ML).
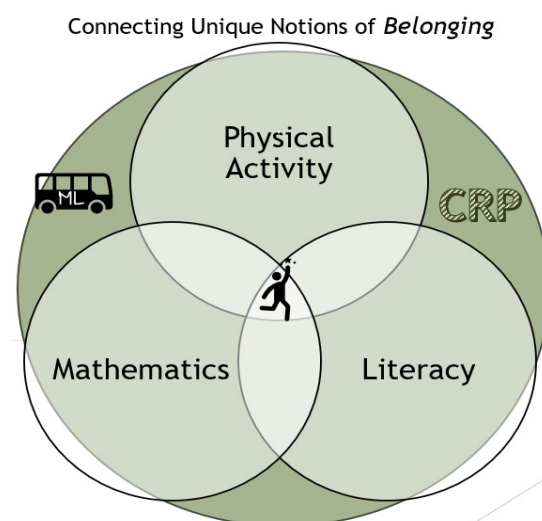

Figure 9. A potential model for multimodal literacies and CRP in content areas

As we continue to develop and improve upon our program in practice through this model, we offer practical applications and broader implications for youth-serving organizations and other relevant stakeholders. Firstly, CRP can and should be a foundational framework for youth development programs regardless of their proposed focus or content area. Based in an ethics of care, program leaders can use CRP to become culturally competent and culturally affirming, promoting comprehensive success and critical thought in youth. Specifically, our use of TPSR shows evidence of cultivating cultural relevance and holistic development. The framework provides opportunities to build relationships, include traditional content literacies, and honor youth voices to facilitate a vital sense of belonging. Since TPSR is framed as *a way of being*, it naturally aligns with our proposed cycle of belonging, interaction, reciprocity, and empowerment. This begins with leader demonstrated behaviors and the foundational, inclusive belief that all youth of diverse backgrounds can thrive when they are given equitable access to this kind of support.

Practically, we suggest youth programs can integrate multiple disciplines cohesively, and ideally should prioritize these possibilities to elevate PYD. While the integration of multiple literacies may be intimidating to program leaders of varied backgrounds, establishing relationships with youth on the foundation of care and trust can provide opportunities to try new and innovative programing. Often, with an initial outline and format, youth are the ones who use their rich and relevant knowledge to lead and take ownership of suggestions and connections between contents and contexts. They simply need to be provided with the opportunity to share. With some attention to the multimodal literacies relevant in youth's social lives and school contexts, leaders can facilitate these multifaceted layers of belonging to initiate the valuable cycle toward meaningful interactions, reciprocity, and empowerment proposed here in our program.

References

Armour, K., Sandford, R., & Duncombe, R. (2013). Positive youth development and physical activity/sport interventions: Mechanisms leading to sustained impact. *Physical Education and Sport Pedagogy*, *18*(3), 265–81.

Arzarello, F., & Robutti, O. (2010). Multimodality in multi-representational environments. *Zdm, 42*(7), 715–31.

Benson, P. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. Jossy-Bass.

Benson, L. P., Scales, P. C., Hamilton, S. F., & Sesma, A. (2006). Positive youth development:Theory, research, and applications. In W. Damon & R. Lerner (Eds.), *Handbook of Child Psychology: Vol. 1. Theoretical models of human development*, 894–941. Wiley.

Chandler-Olcott, K. (2017). Disciplinary literacy and multimodal text design in physical education. *Literacy. 51*(3). 147–53.

Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. Teachers College Press.

Craddock, C. (2022). "I thought MATH was actually mental abuse to humans": Reframing student engagement with mathematical literacies. *Journal of Teacher Action Research, 9*(1), 1–16.

Pinkerton, B., & Craddock, C. (2024). A mindful harmony of multimodal literacies. *Strategies*, *37*(2), 35–7.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.

Daher, W. M. (2014). Manipulatives and problem situations as escalators for students' geometric understanding: a semiotic analysis. *International Journal of Mathematical Education in Science & Technology*, *45*(3), 417–27.

Damon, W. (2004). What is positive youth development? *The Annals of the American Academy of Political and Social Sci-*

ence, 591(1), 13–23.

Eccles, J., & Gootman, J. (2002). Features of positive youth development settings. In J. Eccles & J. Gootman (Eds.), *Community Programs to Promote Youth Development*. National Academy Press.

Fredrick III, R., Marttinen, R., & Johnston, K. (2020). REACH after-school: Integrating literacy and PA in under-served communities. In R. Marttinen, E. Centeio, & T. Quarmby (Eds.), *Before-and-After School Physical Activity Programs Framework, Critical Issues and Underserved Populations*. Routledge.

Fredricks, J., & Simpkins, S. (2011) Promoting positive youth development through organized after-school activities: Taking a closer look at participation of ethnic minority youth. *Child Development Perspectives 6*(3), 280-87.

Freeman, B., Higgins, K., & Horney, M. (2016). How students communicate mathematical ideas: An examination of multimodal writing using digital technologies. *Contemporary Educational Technology, 7*(4), 281–313.

Glesne, C. (2016). *Becoming qualitative researchers: An introduction*. Pearson.

Halliday, M. A. K., & Hasan, R. (1989). Language, context, and text: Aspects of language in a social-semiotic perspective. Oxford University Press.

Hellison, D. (2011). *Teaching Personal and Social Responsibility Through Physical Activity* (3rd ed). Human Kinetics.

Hill, A. (2014). Using interdisciplinary, project-based, multimodal activities to facilitate literacy across the content areas. *Journal of Adolescent & Adult Literacy*, *57*(6), 450–60.

Ivy, V., Richards, K., Lawson, M., & Alameda-Lawson, T. (2018). Lessons learned from an after-school program: Building personal and social responsibility. *Journal of Youth Development, 13*(3). https://doi.org/10.5195/jyd.2018.606

Kim, K., & Kim, K. (2016): Multimodal play–literacy: A preschooler's storytelling, drawing, and performing of dinosaur extinction theories. *Early Child Development and Care, 187*(3–4), 568–82.

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.

Ladson-Billings, G. (1995). But that's just good teaching: The case for culturally relevant pedagogy. *Theory into Practice, 34*(3), 159–65.

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.K.A. the remix. *Harvard Educational Review, 84*(1), 74–84. https://doi.org/10.17763/haer.84.1.p2rj131485484751

Lent, R. C. (2016). *This is disciplinary literacy*. Corwin Publishing.

Pinkerton, B., & Martinek, T. (2022). Teaching personal and social responsibility practitioners' perceptions of the application of culturally relevant pedagogies. *Sport, Education and Society*, *28*(5), 553–64.

Saldaña, J. (2009). *The coding manual for qualitative researchers*. Sage.

Shanahan, T., & Shanahan, C. (2017). Disciplinary literacy. *Educational Leadership*, *74*(5), 18–22.

Shiver, V., Andrews, K., & Hemphill, M. (2020). Preservice teachers' learning to implement culturally relevant physical education with the teaching personal and social responsibility model. *Physical Education and Sport Pedagogy, 25*(3), 303–15. https://doi.org/10.1080/17408989.2020.1741537

Stein, P. (2008). Multimodal instructional practices. In *Handbook of Research on New Literacies* (pp. 871–96). Lawrence Erlbaum Associates/Taylor & Francis Group.

Taylor, C. (2018). Proving in Geometry: A sociocultural approach to constructing mathematical arguments through multimodal literacies. *Journal of Adolescent & Adult Literacy*, *62*(7), 175–84.

Walsh, D., & Wright, P. (2016). The TPSR alliance: Community of practice for teaching, research and service. *Journal of Physical Education, Recreation & Dance 87*(5), 35–38.

Appendix A

TPSR Implementation Checklist

Trainee: _____   Date: _____

Session/Sport: _____   Observer: _____

Additional Comments:

_____

_____

_____

Which of the levels (goals) was directly addressed in this session? Mark all that apply	Which components of the Lesson Format were used in this session? Mark all that apply
___ Level 1 respect	___ Relational time
___ Level 2 self-motivation	___ Awareness talk
___ Level 3 self-direction	___ Physical activity with level/life skill/ value
___ Level 4 caring	___ Group meeting
___ Level 5 transference	___ Reflection time

Which of these Teach strategies was used in this lesson? Mark all that apply	Which of these Student Behaviors could be seen in this lesson? Mark all that apply
___ Modeling respect	___ Participating
___ Setting expectations	___ Engaging
___ Providing opportunities for success	___ Showing Respect
___ Fostering social interaction	___ Cooperating
___ Assigning management tasks	___ Encouraging others
___ Promoting leadership	___ Helping others
___ Giving choices and voices	___ Leading
___ Involving students in assessment	___ Expressing voice
___ Addressing transfer of life skills (levels)	___ Asking for help