A Qualitative Evaluation of the 4-H Record Book in Light of the PYD Concepts: Belonging, Mastery, Independence, and Generosity

Lynette H. Bikos
Department of Clinical Psychology
Seattle Pacific University
Seattle, WA
lhbikos@spu.edu

Deanna M. Haney
Department of Industrial/Organizational Psychology
Seattle Pacific University
Seattle, WA

Katie Kirkpatrick-Husk
Department of Industrial/Organizational Psychology
Seattle Pacific University
Seattle, WA

Serena Hsia
Department of Industrial/Organizational Psychology
Seattle Pacific University
Seattle, WA
A Qualitative Evaluation of the 4-H Record Book in Light of the PYD Concepts: Belonging, Mastery, Independence, and Generosity

Lynette H. Bikos, Deanna M. Haney, Katie Kirkpatrick-Husk and Serena Hsia
Seattle Pacific University

Abstract: The highlights of a study of the 4-H Record Book (RB) in light of the four positive youth development (PYD) concepts: belonging, mastery, independence, and generosity are discussed in this paper. Utilizing qualitative methods we interviewed 21 participants (14 leaders, 9 recent 4-H alumni) from 9 states. Results describe the ways in which participants perceived that the RB (a) supports the four PYD concepts (e.g., “RB fosters independence through the goal setting, monitoring, and appraising process”) and (b) does not support, or should be revised to support the concept (e.g., “RB competitions may hinder mastery”). Our results support the RB as a PYD intervention but we recommend that states/counties consider these results when revising RBs. In light of concerns about age and developmental appropriateness, we suggest that the most pressing question is whether or not the traditionally formatted RB is appropriate for all 4-Hers. We encourage RB committees to engage professionals with developmental expertise (e.g., educators) in RB revisions.

Introduction

"The 4-H Study" (Lerner, Lerner, et al., 2012) is a longitudinal study that began with fifth graders in the 2002-2003 school year (Wave 1). Since its inception more than 7,000 participants from 44 states have participated in 8 waves/years of analysis. Of significance to our research project is the contribution of 4-H to the positive youth development (PYD) outcomes evidenced in its members. Across the spectrum of analyses, 4-Hers demonstrated higher PYD outcomes, lower risk outcomes, stronger educational outcomes, and greater pursuit of science-related programs and careers. The outcome variable, contribution, (i.e., making contributions to self, family, community, and to the institutions in civil society) is considered to be a culminating outcome of youth development programs that are predicated on PYD principles. Wave 8 (2012) data suggested that 4-Hers in the longitudinal sample are 2.8 times
more likely than non-4-H youth to make contributions to their communities and 2.5 times more likely to have higher scores on measures of civic involvement and civic identity. Moreover, in comparison to youth who were in other (e.g., non 4-H) programs or no programs at all, 4-Hers were 3.4 times more likely to be in the optimal longitudinal trajectory that modeled contribution. In light of the supportive evidence regarding the efficacy of 4-H as a PYD intervention, we believe it is timely to begin to understand how the interventions (e.g., most common activities, programs, requirements) within the 4-H program are related to PYD outcomes.

**Record Books in 4-H**

Record Books (RBs) have been part of the 4-H Youth Development Program (YDP) since the early 1900s (California State 4-H Office, 2011). In the early years, RBs focused on tracking project skill development, analyzing profits/losses, and logging activities related to the activities involved in agricultural and home economics projects. The migration of 4-H from rural into suburban and urban areas resulted in parallel shifts in RB focus. In the 1980s the RB was reformatted to conform to national achievement (subsequently eliminated in the 1990s) and core values of the 4-H YDP. More recent updates of the RB have attempted alignments with the PYD elements embraced by 4-H.

There is no national 4-H RB. Rather, each state determines its own RB format and judging standards (California State 4-H Office, 2011). Some states (e.g., New Jersey; Dept of 4-H Youth Development, 2003) require the 4-Her to complete the RB to be a “member[s] in good standing” (p. 4). Others, (e.g., California) do not require it for membership, but indicate that the RB is prerequisite to apply for certain achievement awards.

Consequently, the purpose, format, and evaluation standards for RBs vary from state to state. Common across most states’ RBs is attention to goal setting; tracking goal progress and appraisal; keeping financial records; reflecting on accomplishments; and tracking growth from year to year (Michigan State University Extension, n.d.; Texas AgriLife Extension Service, n.d.; California State 4-H Office, 2011; Dept of 4-H Youth Development, 2003).

Because the RB pre-dates the 4-H YDP’s adoption of and commitment to PYD principles, some have raised questions about whether or not the RB contributes to PYD. The PYD principles utilized in 4-H are reviewed in the following section.

**Positive Youth Development Principles in 4-H**

4-H has adopted three frameworks for integrating PYD into its work (National 4-H Council, 2009). These begin with eight essential elements organized within four concepts (belonging, mastery, independence, generosity). The essential elements are considered to be necessary programmatic attributes (e.g., opportunity for mastery, a safe environment) that create environments (identified as the four concepts) that are conducive to optimizing youth development. PYD outcomes are assessed with the 5 (or 6) C’s (competence, confidence, connection, character, caring, and contribution); in fact these are the outcome assessments used in The 4-H Study (Lerner, Lerner, et al. 2012).

In addition to an adoption of PYD principles, the 4-H YDP also has training guidelines and standards that promote an experiential approach learning, a responsiveness to different learning styles, and a commitment to developmentally appropriate (and individually tailored) programming based on age and unique needs of the 4-Hers (California State 4-H Office, 2011; National 4-H Council, 2009).
The RB and PYD
Although highly regarded in the 4-H YDP, the RB is not without its critics. One example, is an informal satisfaction-style survey \((N = 102)\) that took place during the 2009-2010 4-H year in Skagit County, WA (Frietas, n.d.). Results suggested that nearly half (48\%) were dissatisfied with the content/format of the RB. Sixty-six percent did not perceive that the RB could be taught (with a minimum of instruction) to new and experienced leaders, members, and parents. Although 62\% perceived that awards were the major motivator for youth to complete their RB, 50\% did not perceive that the RB was judged in a sensible way. A summary of responses to open-ended questions on the survey showed a desire for (a) more clear instructions, (b) improved training (on-line tutorials, more training opportunities, clear examples, step-by-step instructions), (c) transparency in judging, and (d) a format that is easier, age-appropriate, with less redundancy, simplified/relevant financial components, and perhaps electronic alternatives. Because this survey was not formally peer reviewed, we present and interpret its’ results with caution.

State 4-H offices are in varying stages of evaluating (and, perhaps revising) the RB in light of PYD, learning strategies, and developmental stages. Several state 4-H offices have been revising RBs to promote PYD. For example, in Texas, revisions were intended to be more age appropriate, offer an optional on-line alternative, and adjust the adjudication process so that evaluation focused more on personal achievement (Texas AgriLife Extension Service, n.d.). The New Jersey RB includes a checklist that connects the four Hs with the four PYD concepts: head with independence, hands with generosity, heart with belonging, and health with mastery. 4-Hers check which of the 55 items they have “learned or improved” during the preceding 4-H year. For example, the “Head/Independence” category contains the items, “try something new,” “set goals for myself,” “plan a project.”

Among the RBs that we reviewed, the California RB narrated the integration of PYD most clearly. From the beginning, the CA RB identified \emph{thriving} as a target. The books’ authors suggested that the activities required in the RB would contribute to youth thriving through (a) identifying and nurturing meaningful and motivating passions and skills, (b) promoting a growth mindset that includes viewing challenges as opportunities, (c) setting, monitoring, appraising, and adjusting goals, and (d) engaging in self-reflection (California State 4-H Office, 2011). Furthermore, as part of the goal setting process, 4-Hers are encouraged to set goals related to the 6 Cs of PYD. Instructions in the RB indicated that when 4-Hers reflect on these goals they are moving toward thriving.

Instructions in the California RB connected each of the four concepts to RB activities. The authors suggested that the RB supports belonging when 4-Hers receive awards (symbols of belonging) for their participation in activities. The RB supports mastery in the RB competitions when 4-Hers receive feedback on their 4-H involvement and RB skills. The RB supports independence because 4-Hers are encouraged to participate in leadership activities. Finally, the RB supports generosity because 4-Hers are encouraged to engage in community service. Statements in the instructions for the California RB also connected the RB to experiential learning, learning strategies, and provided guidance for developmentally appropriate RB expectations. Some might question if that the connections between California RB and PYD are more about the 4-H YDP and not the RBing activity; that the RB is merely the place where some of these 4-H activities (i.e., participating in service learning) are documented, and through their documentation, encouraged.
With regard to standards for developmentally appropriate programming, it is common for states to offer different RB versions (or guidelines on how much of the RB should be completed) for differing ages. As an example, the Texas 4-H RB (Texas AgriLife Extension Service, n.d.) has different RB formats for junior (ages 9-10), intermediate (ages 11-13), and senior (ages 14-19) 4-H members; some states suggest that members younger than 9 (“primaries”) should not complete a RB (California State 4-H Office, 2011). Additionally, while adults (e.g., parents, volunteers, leaders) are not to complete the RB for the 4-Her (California State 4-H Office, 2011), parents and volunteers are encouraged to help 4-Hers with the forms and with record keeping. In fact, “Younger 4-Hers will probably need extra help and encouragement” (Michigan State University Extension, n.d., p. 2). Similarly, it is common for 4-H programs to allow accommodations for 4-Hers with special needs. The California 4-H program invites such accommodation and requires an accompanying note that describes what accommodation was made (California State 4-H Office, 2011).

**Purpose**

We used qualitative research methods to explore the experiences of 4-H stakeholders with the RB. Specifically, we were interested in knowing stakeholders’ (i.e., 4-H faculty, staff, leaders/volunteers, parents, alumni) perceptions of the alignment of the RB with the 8 essential PYD elements, 4 PYD environmental concepts, and 6 C outcomes. We also inquired as to the RBs capacity to (a) contribute to the experiential learning approach, (b) flex for alternate learning strategies, and (c) accommodate varying developmental abilities. We also sought to capture ideas for RB revisions.

**Method**

**Locating the Paradigm and Method of Inquiry**

Our research design was grounded in the PYD foundations of the 4-H YDP. We used the consensual qualitative research method (CQR; Hill, 2012). Scholars suggest that CQR contains constructivist and postpositivist characteristics (Hill 2012; Ponterotto, 2005). Constructivism is found in its naturalistic and interactive qualities. Furthermore, words and text provide the source for meaning making. Postpositivism is evidenced in the use of a semi-structured interview protocol, the requirement of consensus regarding emergent themes, and the goal to objectively present the findings.

**Participants**

Hill (2012) has recommended a sample size between 12 and 15 and suggests including a larger sample if the researchers believe there may be subgroups. We invited participants who had had previous experience with the RB to participate. 4-H “leaders” (i.e., a clustering term including faculty, staff, leaders, volunteers, and parents) were invited if they had (a) experience helping a 4-Her complete the RB, (b) assisted in RB development/training/revisions, (c) had participated in RB judging, or (d) had a stake in the 4-H RB process. 4-H alumni were invited to participate if they had completed at least one RB in the past five years. All participants had to be at least 18 years old. Our sample included 21 participants representing 9 states. 4-H leaders (n = 14) were 93% female and averaged 48 years old. 4-H alumni (n = 7) were 71% female and averaged 21 years old.

**Data Sources**

**Demographic questionnaire.** Open-ended questions inquired about role in 4-H, years involved in the 4-H program as a volunteer, years involved in the 4-H program as a 4-Her, state, race/ethnicity, and age.
**Interviews.** Each interview followed a semi-structured protocol and was 30 to 90 minutes long. The protocol was based on the PYD foundations of the 4-H program and was intended to understand how the traditional 4-H RB contributes to them. We invited the participant to start by describing their experience with the 4-H YDP and their experience with the RB. We began with a brief presentation about the eight essential elements and the four concepts. Specifically, we made information from 4-H literature (National 4-H Council, 2009) available to the participant. We then asked three questions:

1. Looking at this chart, please tell us how you think the 4-H Record Book aligns with the specific concepts and elements (e.g., belonging and its associated elements of a positive relationship with a caring adult, an inclusive environment, a safe environment).
2. If you think that the 4-H Record Book does not contribute to these specific elements (or may operate in an opposite way) please say so.
3. If you have ideas for how the 4-H Record Book could be revised so that these specific purposes are supported, please share your ideas.

We repeated this process for the 6 Cs; the experiential learning model; the competitive, individualistic, and cooperative learning styles; and the RBs capacity to respond to developmental needs and age. We closed asking about “additional ideas” the participant might have that did not fall into the a priori structure of our interview.

Although scripted, the interviews were conducted in a softly-structured way so that we could follow the interviewee’s lead in order to obtain a richer, thicker description of the participants’ lived experiences.

**Documentation of the interview.** Interviews were conducted with at least two members of the research team present. In this manner, one primarily served as the interviewer and the other as the note-taker. In many cases, both interviewers took notes. Immediately after the interview, the interviewers created a single case record. In-as-much-as-possible, these transcripts reflected the words and perspectives of the interviewee and not the interpretation of the interviewers.

**Researchers-as-instruments.** The first author was the principal investigator in this study; she designed the basic parameters of the study and initiated contact with our primary sources of recruitment. The first author has been with 4-H for 11 years in a role as a 4-Her and 12 years as a volunteer. The remaining investigators were doctoral students in industrial/organizational psychology programs enrolled in a class on qualitative research methods. Only one had previous, limited, experience, as a 4-Her, with the 4-H YDP.

Because the doctoral students were largely unfamiliar with the 4-H YDP and the RB, several steps were taken to maximize their familiarity with the program. First, an early class meeting was held at the county extension office with a presentation on 4-H. Second, as a class assignment, the doctoral students were each required to keep their own RB, acting as if the “class” were a 4-H project. Specifically, the 4-H Record Book (Yearly) – Level 2 from Snohomish County, WA, [http://snohomish.wsu.edu/4-H/4-Hmembers.htm](http://snohomish.wsu.edu/4-H/4-Hmembers.htm) was the assignment. A score on this project was included as part of their final course grade.
Procedure
Our project was approved by Seattle Pacific University’s Institutional Review Board. (#111202038, expiring 06-02-2013). The procedures listed below were those specified in the IRB application.

Data collection. 4-H leaders and alumni who met the inclusion criteria were identified through networking and snowballing strategies. We placed research announcements, with requests for participation on individual 4-H leader and 4-H group pages on social network sites. Additionally, we e-mailed individual invitations (with requests for forwarding to additional qualified participants) to individuals whom we believed to be qualified to participate.

Once identified by name, we e-mailed potential participants a scripted invitation and attached informed consent and demographic questionnaires. Participants were invited to participate in the manner most convenient to them. Options included (a) individual interviews on the campus or at the county extension office, (b) telephone interviews, or (c) on-line interviews (e.g., voice/video conferences). Once the participant selected an option, a member of the research team confirmed the appointment and sent the respondent the semi-structured interview protocol. Irrespective of the format, interviews began with a quick review of informed consent, confidentiality, and purpose of the project.

Data analysis. Using an Excel spreadsheet, we divided the responses from interview transcripts into units that consisted of one complete thought. Subsequently, team members assigned units to domains (major themes) that corresponded with the PYD frameworks that framed the interview protocol. Disagreements and inconsistencies that emerged during this process were resolved through consensus and, when necessary, the domain list was revised. After establishing a stable list of domains, we summarized the content of each domain into categories (subthemes of a domain) and subcategories. In a manner similar to the development of the domains, team members developed the categories/subcategories independently and then discussed these ideas until consensus was achieved. A CQR frequency table was constructed and frequency labels were assigned.

Auditing occurred throughout. Our audit trail included original transcripts; their unitization in an Excel spreadsheet; the assignment of domains, categories, and subcategories; working definitions of the domains, categories, and subcategories; and a resultant case report. The initial audit occurred in rotating teams. As our teams categorized the units in each domain we called attention to units of data that we believed to be incorrectly assigned to the domains we were categorizing. We brought these to the attention of the entire team and negotiated (a) reassignment of the unit of data to a different domain or (b) refinement of a domain name or definition. Further auditing occurred during the writing process. That is, as we wrote the manuscript, it sometimes occurred to us that categories might be divided, subcategorized, or collapsed; or that the assignment of certain data units would fit better in other subcategories/categories/domains.

Trustworthiness
The trustworthiness of our project is supported by our attention to several criteria (Morrow, 2005). Credibility was established through persistent observation of the phenomena (we interviewed 21 participants) and by writing thick, rich descriptions of our results. The transferability of our findings was supported by (a) clearly defining our phenomena of interest, (b) sampling broadly within that definition, and (c) providing a detailed description of our research method. Dependability was supported by creating an audit trail and executing multiple
waves of audits. Confirmability was supported through our acknowledgement that the result was a negotiated text. That is, while we attempted to record and interpret the participants’ perceptions as accurately as possible (e.g., by careful note-taking, by arguing to consensus) we expect that our own biases entered the analysis in ways that remain unknown to us. An additional method to support confirmability was to seek, receive, and incorporate formative feedback from a stakeholder presentation scheduled as part of the doctoral course.

Results

Results are organized within the four PYD concepts belonging, mastery, independence, and generosity. At the outset we acknowledge that our interview protocol inquired about the variety of PYD schemas and 4-H approaches (e.g., 5/6 Cs, experiential learning, developmental/age appropriateness, learning styles). In analyzing the data, we realized the large proportion of overlap between frameworks (e.g., much of the same data would be doubly [or triply] coded in mastery [4 concepts], competence [5 Cs], and perhaps age/developmentally appropriate programming). This overlap would produce redundancy in reporting results for each of the frameworks and would result in a length that would preclude its publication in most peer reviewed outlets. Consequently, we believed that organizing our results by the four concepts would be most parsimonious, readable, and actionable. Further, within our category structure we have attempted to address frameworks/issues such as experiential learning and age/developmental appropriate programming.

Readers are encouraged to read the results’ narrative in tandem with the CQR frequency table (Table 1); it serves as an outline and provides an index to the salience of each theme. The representativeness of each category is indicated in the frequency column. Because we believe that the convergence and divergence of leader and alumni voices may be informative, the CQR frequency table provides frequency labels for the entire sample and then disaggregates it for alumni and leader perceptions, separately. For the total sample, “General” means that the core idea is applicable to all or all but two of the participants (90%); “typical” means that it is applicable to at least half of the participants; “variant” means that it was applicable to up to half of the participants. “Rare” means that it applies to one or two cases. Details of the rules we used for disaggregating the subsamples are provided in the table note.

Quotations from the stakeholders are presented throughout the results. At times, the grammar in these quotations has been amended to improve the readability of the manuscript. All changes have been made with care so that the quotes reflect the speaker’s intentions.

Belonging

Belonging is prerequisite to RB success (variant).

A caring adult must be involved. Conversations held between a leader and 4-Her such as, “Did you realize it was going to cost so much money to shoot your rifle? Do you want to continue to do that?” can make the RB “more real life instead of words and numbers on a paper.” “Involved parents” are also critical to RB completion. A 4-H alumnus recalled, “When I was younger I hated it because it was distracting from my fun. My mom really helped me A LOT and made me write it out. And then would force me to do the stuff I hadn’t finished. Learning it was basically just being forced to do it for a couple of years.” During teenage years the RB became easier, “but also because my mom was looking over my shoulder.”

RB is part of club work. Clubs differed in their support of RB completion: “Once a year someone would show you how to do it and what each piece was for.” One club had difficulties
with RB completion because, “…they wouldn’t get looked at. RBs were being copied from year to the next and just changing the title page.” Although it took more than two years to be successful, a committee began a process of regular evaluation, feedback, and ribbons. Several mentioned that club leaders can create supportive structures for RB work in the meeting by saying, “Let’s pull out our books and update them.” “Regular check-ins” were seen as valuable for those who did check and desirable for those who did not.

**RB fosters belonging... (variant).**

*...when a caring adult is involved.* At first glance, this subcategory appears to repeat the subcategory in the “Belonging is prerequisite to RB success domain.” It is different because in this category, the RB is a mechanism to foster belonging. One alumnus summarized the perspectives of several when he shared stories about working with a county extension agent who, using the RB, encouraged him to reflect on his time and to see how he had grown. Another alumnus said, “I remember always looking up to my 4-H leader and wanting to be exactly like them when I grew up...When you are sitting around working on your RB together and asking each other questions and helping each other out, it’s really inclusive.” Leaders suggested that the RB is a tool that can be used to guide conversations about growth and development.

*...when the RB is part of club work.* As such, it fosters belonging in a variety of ways. Some suggested that the RB is part of membership, “Record keeping is part of being a 4-H member, it contributes to the belonging of the group. We're all a part of it.” Others noted that belonging is fostered when, "older kids help the younger kids.” More generally, “getting opinions from peers and leaders” contributes to connections. One leader even described groups completing the RB as a “social event.”

*...when the RB is shared with others.* One alumni described how she showed her RB to family, friends, members of the community, and her employers. She believed that using the book in this way provided connections between her acquaintances and her identity and involvement in 4-H.

**RBs could foster belonging...(variant).** Participants shared several how ideas for improving the ability of the RB to contribute to belonging.

*...if technology were leveraged into the structure/process.* Responding to concerns that RBs can be confusing, one leader suggested a “collaborative website where people could ask questions and get help with RBs.” Another leader suggested utilizing Internet based “tools that allow you to share cooperatively across locations.” This leader added that cooperative and collaborative learning “is the present and future of the world of work” and that the RB could be modernized to “teach kids this way of learning.”

*...if the RB included more explicit questions about relations with others.* Leaders recommended adding items that require youth to “draw connections about how what they are doing creates connections to individuals/groups.” Another leader had a similar idea but then struggled to think of what appropriate RB items would be.

*...if caring adults had RB training.* One leader voiced the importance of training for both parents and leaders. Such training would “go a long way in helping people understand why we do the RB, its benefits, and how it ties into 4-H.”
RB documents belonging elsewhere in 4-H (rare). A few felt that the connection of the RB to belonging is that it provides a place to reflect on this concept. One leader said, “I do think the RB forces and reinforces the actions an individual has to take in the 4-H Program. If you look at the RB, the RB asks you to reflect on and document all four of the concepts.” Another said, “4-Hers do have the opportunity to talk about positive experiences they had with an adult.”

4-H in general (but not the RB) fosters belonging (variant). Although our research protocol asked specifically about the RB, participants shared how the 4-H program, in general, contributes to belonging. For at least some participants, the “4-H in general” response seemed a protective response for the organization, when s/he could not see how the RB contributed to belonging. “Belonging…I don’t really see how the RB can do that. I see it in other parts of 4-H, but not the RB.”

RB does not foster belonging (rare). Some were adamant that the RB does not foster belonging and could not imagine how the RB could be modified to do so. One alumnus stated, “I always had to do the RB alone.”

Mastery
The mastery of record keeping skills has broad and positive application (typical).

RBing facilitates the mastery of record keeping skills. 4-Hers gain accounting skills (profit/loss statements, tracking expenses), organizational skills (e.g., “Having to organize my files and having to keep them all together to turn them in helped me so much”), computer skills, records showmanship (e.g., “putting together a presentable binder…formatting”), the expectation of annual assessment and reporting (e.g., “like an annual checkup”), and time management (e.g., “the need to not procrastinate”). Some suggested that RBing also facilitates academic skills such as critical thinking and writing.

RBing skills are transferable and expandable. Alumni spoke of the real-world applicability of skills acquired during RBing to their adult life, “It prepares us for life after we leave 4-H,” “Oh, I can do this. I've done this already,” and “It has helped with a number of projects since I've left 4-H.” Comparing skills learned in her Sewing/Needlework project to those gained from RBing, one alumnus said, “Even though I’m not still doing clothing type things, I'm still doing things that I have to take records of.” Leader perspectives voiced a similar theme but with a more parental tone, “They may not be really aware of how this is going to relate in their real life, but it's going to whether they know it, or like it, or not.”

Skills obtained from RBing are directly transferable to post 4-H applications. Alumni and leaders who had completed RBs used it for filling out applications for college, scholarships, and employment. While most used the RB as an organized resource for easily locating information (e.g., “It was all there for me which was amazing”), a few were able to use the actual RB itself. In one case, the regional RB requires the 4-Her to create an actual resume; in another case, the application for 4-H scholarships was the RB itself.

RBing facilitates mastery of project skills by amplifying the experiential learning model (typical).

The RB extends the experiential learning process. The experiential learning model (National 4-H Council, 2009) is a 5-step model beginning with an experience (e.g., youth try something before being told or shown how), then processing the experience through the steps of sharing, processing, generalizing, and applying. Participants perceived that the RB joins the experiential
learning model at step two (sharing) and provides more intentional, deep, reflection about the experience. Leaders, especially, voiced enthusiasm for the connection between the RB and the experiential learning model, “The RB is absolutely in line with the learning-by-doing model and it enhances it in a way that wouldn’t be achievable without it.”

*The RB promotes reflection beyond the experiential learning model.* “Reflection” was a term that surfaced numerous times in discussions of “mastery” and the RB. Participants suggested that reflection occurs in the short-term (annual RBing) and long-term (an accumulation over the years). Moreover, reflection on project goals may lead the 4-Her to recognition of the more general life skills that are attained. One participant said, “You start realizing all the other things you learned like taking criticism, how to work with others...things you weren’t aware that you were learning at the time, but you start thinking about what you learned – not just how to handle a dog.” Writing it all down and recording it all was a really reflective way to see that stuff.” An alumnus said, “It helps you see the time that you spend with stuff and shows your start point and your finishing point that you wouldn’t see without taking the time to fill out the RB.”

**RB competitions help and hinder mastery (typical).**

*Award structures are extrinsically motivating.* The awards and recognitions with competitions motivate 4-Hers. Counties varied in the types of competitions (e.g., Danish, ranked, or both) and the awards (e.g., ribbons/pins; cash prizes; scholarships to camps, conferences, 4-H Congress). One leader suggested that the motivation created through competitions is necessary to cultivate value for RBing, ““There must be a big enough carrot to entice the youth to do a good job year after year until they see the value in it for sake of just having the records and the benefit of that.” In contrast, several suggested that certain award structures were flawed. In some counties, youth who earned the top recognition were prohibited from entering/ winning again for a certain period of time (e.g., 3 years) or until they aged into the next competitive bracket. One parent described a daughter who “became sloppy -- quite frankly, because she wasn’t competing. Now it will be a challenge to step-it-up again when she moves to the next age bracket. They get taught to do a good job every three years.” Similarly, other leaders lamented the decreased focus on RBs, suggesting that the Danish system (e.g., “they just turn it in and come back with a ribbon”) and lack of showcasing the RB at the fair has resulted in substantially reduced engagement with the RB.

*Competition facilitates engagement in the RB and in project work.* When the competitive focus was on the RB itself, some 4-Hers increased engagement in RBing, “That’s what motivated me. I wanted to do better and better and achieve perfection and the RB was the perfect environment for that. I loved getting feedback from the judges.” Other competitions used the RB to determine project achievement awards. Therefore, the RB-based competition appeared to encourage engagement in the project itself. For example, a 4-Her in the leadership project might consider being, “a junior leader so I can put it in the RB.”

**RB competitions may interfere with mastery.** There are some aspects of RB based competitions that may discourage mastery. This perspective was more typical of alumni. First, RB competitions “create more losers than winner.” One alumnus said, “I would argue it harms the youth...it’s the wrong message to send to kids.” Leaders were concerned that 4-Hers may drop 4-H because of the discouragement that comes from competing and from receiving critical (as opposed to constructive) criticism. The second subtheme was that 4-Hers begin to “play the game of winning,” at the expense of developing RBing skills and using the RB as a place for reflection and application.
**RB mastery (and persistence) could be improved through age/developmentally appropriate revisions (general).** Participants raised concerns about the inappropriateness of the RB structure (e.g., instructions, requirements) and use (e.g., the age at which RBing should be required). The concerns were serious. At worst, 4-H may be losing members because of the RB, “We have a high first year drop-out rate because of the RB…What do you mean you want me to write a goal? What's a goal?” Another leader added, “Whenever they are starting it, it needs to be simplified...otherwise they get overwhelmed and walk away, which is sad.”

The subcategories in this section combine pair participants’ concerns with their recommendations for improvements.

*Provide age-appropriate structure and instructions.* Several participants commented on the perceived difficulty of current RBs, “4-H parents don’t get how to fill out the form,” and “It can be overwhelming for young kids, and their parents, too.” “The form needs to look like something a 10-year-old would fill out, using words a 10-year-old knows.” One leader described a RB that was organized by the experiential learning model. Step 5 in the model is *application.* The leader described the perceived difficulty in this task, “They are so frustrated with step five that next year they are like, ‘Nope. I’m not filling that out again next year.’ Why have it when they won’t fill it out next year? If you can’t get past year one, then it’s defeating the purpose.” Consequently, participants asked for more explicit instructions/examples, written in words appropriate for the intended age group and developmental capacity. RB training for 4-Hers, parents, and leaders was also encouraged. One leader recommended that educators/developmental experts participate in RB revisions.

*Promote flexible RB formats.* “Have you ever seen how a 6-year-old writes? They use enormous letters. They have a have a hard time managing size...The RB definitely doesn’t work across age groups and not for developmental problems.” Several questioned the appropriateness of a written RB for young children and youth with developmental disabilities. Leaders praised the transition to word-processed/computer formats. However, they encouraged additional alternatives including the explicit allowance of a transcriber, alternative formats (having pre-writers or those with disabilities tell or show leaders what they've learned), and “making it really easy for younger kids,” “so there wouldn't be such a fight to do the RB.”

*Create incremental challenges that correspond with child/youth development research and practice.* Counties/states vary with regard to the age that RBing begins. In one region, the youngest 4-Hers (in their first four years of 4-H) merely “watch the older kids do their RBs, and watch what results they achieve, and then you do them yourself.” In another region the junior 4-Hers complete “a simple one page. You fill out what you want to learn and what your goals are.” Participants promoted the idea that there should be age-appropriate books for “junior, intermediate, and senior group...you pack in more as they get older...higher level words could be used...it could take more thought to complete as you get older.” A leader identified discrepancies between the “4-H curriculum books that are age-appropriate and the RB that is nothing like the curriculum books.” In terms of content, participants suggested that as 4-Hers mature, they should be expected to identify more goals (e.g., start with one; expect 3-5 goals from seniors). Additionally, the depth of reflection and level of detail should increase over time.
Independence
RB fosters independence... (typical) ...through the goal setting, monitoring, and appraising process. RBs provide instructions and structure for 4-Hers to set goals, document goal progress, and evaluate goals progress at the end of the year. 4-Hers record the steps and actions they take in their project work and activities and document what they learn. A leader suggested that through this goal setting/appraising process the 4-Her competes with themselves by comparing their progress against their own standard. Another leader described the uniqueness of 4-H RB goal writing, “In school you learn what is set out for you, in 4-H there are more individual choices.”

...when it is completed independently. Overwhelmingly, the voices in this category suggested that doing the RB “on your own” was required. Four different alumni stated it this way: “You’re the only person doing your own RB,” “I always had to do the RB alone,” “You have to do the RB on your own,” “No parents or friends helped you.” For the most part, the voices in this category suggested that the independent nature of the RB is beneficial, including a sense of ownership over one’s hard work. One participant described the benefit of independent work this way, “I did it on my own and it showed me that I could do that on my own and be successful.” At the same time, participants suggested that early RBing often requires coercion. A leader said, “Not all parents push them, but I see the value in the RB so I make them do it every year.” Similarly, a parent spoke of “forcing him to do his work.”

...when there is room for individualization. One described the process (a process that unfolded over years) of individualizing the RB to her style, “like you are repackaging what you just learned.” 4-Hers who compare their RBs to others vicariously learn from their peers’ work while they develop a personalized style. The amount of “individualization/creativity” allowed in the RB varies by state and has evolved over time. More recent books are “less strict” and allow “more creativity.” Such individualization also includes the self-paced nature of the RB. One alumni stated, “You are working at your own pace which is very similar to work and college, where how you’re going to do it is all your own decision.”

...by providing a long view. Alumni and leaders both described the value of “seeing growth over time.” The reverse-chronological, longitudinal view of growth provides 4-Hers with “numbers, things I did, and what they meant to me,” “how I overcame obstacles,” and the “size and scope” of projects. One alumni said, “It was cool that you could look back at all the stuff you did and reflect on it. And then it helps you get ideas about what to do the following year.” As such, the “structure and direction” of the RB, when completed annually, and over a period of years, contributes to “self-determination,” and “seeing one’s self as an active participant in the future.”

...for those who are wired for it. RBing is easier for some than others. One alumni said, “if you are individualistic, you can thrive,” another suggested that success in the RB was “more about you being motivated and understanding what you were doing.” A leader summarized this subcategory well when she said, “You get out what you put in...the kids who are motivated and academic will gain the most out of it.”

RBing independently is a gradual process (variant). The ability to complete the RB in an independent manner increases with age, maturity, and experience with the RB. Younger children may lack the motivation, reading/writing ability, and conceptual skills to complete RB tasks. Therefore, substantial external guidance (from adults or older 4-H members) will be required in the early years, decreasing as the youth matures. One leader said, “We need to
teach them and show them at first... and then have them do it completely on their own.” Another leader stated “Young kids are just working through the steps because they kind of have to... they're not getting as much independence until they’re older.”

**Generosity**

**RB contributes to generosity through reflection (variant).** Mere documentation of service learning and community service may lead to reflection that, in turn, cultivates generosity. “The RB causes you to reflect on the actions you are taking and actually take time to have insight.” An alumnus suggested that reflecting on what you’ve done “helps you get ideas about what to do the following year. It kind of helps you with your calling.” A leader (also a former 4-Her) told the story of getting an idea during the RB about how to use her project skills for a community service project while she was completing the RB.

**RB documents generosity elsewhere in 4-H (variant).** Some were only able to see how the RB contributed to generosity in terms of documentation as they mentioned “I think this is the only way the RB fits... it tracks generosity,” “The RB wouldn’t lead them to service, it’s just a way to document their service,” and “Charity was recorded there but that was just recording it not really doing anything with it directly.” A few connected the documentation of community service to the competitive aspects of RB-related awards. An alumni said, “Qualifying for achievements is very community service driven...When it came down to report form time there was no stone left unturned to put into the RB that I had done a TON of community service.”

**4-H in general (but not the RB) fosters generosity (variant).** Similar to other categories, our research protocol asked specifically about the RB; however, participants shared how the 4-H program, in general (but not the RB), contributes to generosity. For example, one participant said, “Generosity... I don’t really see how the RB contributes. I see the competency in other parts of 4-H but not in the RB.”

**Discussion**

Results of our study provide strong support for the 4-H Record Book as an activity/intervention that contributes to the four PYD concepts: belonging, mastery, independence, and generosity. Within the context of these results are also areas of weakness, where current practices could be improved. Because the results of our study have numerous potential implications, and could result in a very long manuscript, we focus on a single implication that we believe to be most salient.

Emerging from the CQR category structure are several themes that, when considered together, suggest that RBing, in its traditional form, might not be appropriate for everyone. Within the Belonging domain, it is clear that the involvement of a caring adult is prerequisite to RB success. Within the Mastery domain, the category “RB mastery (and persistence) could be improved through age/developmentally appropriate revisions,” provided challenges and recommendations to RBs in their current forms. Finally, in the Independence domain, two categories (“RB fosters independence...for those who are wired for it” and “RBing independently is a gradual process”) suggest that RBing may be unnecessarily difficult at young ages and for those who struggle with tasks that are heavily academic in terms of reading, writing, and analytic skills. Consequently, we strongly encourage state/county RB committees to consider the alignment of age/developmental capacity with RB expectations.
Limitations
Although our research design and its implementation are consistent with the standards for CQR (see Hill, 2012), qualitative methods have limitations. Specifically, the goals of qualitative inquiries never include generalization or establishing causal relations. Rather, the purpose is a thick rich description of a local phenomenon.

More importantly, the voluntary nature of the project likely contributed to a selection bias. In this case, our participants tended to be RB proponents. Our results might have been quite different had we interviewed 4-H alumni and/or parents of 4-Hers for whom the RB was a struggle and who elected not to participate in the RBing requirement of their county or state.

As mentioned in the introduction, states/counties and projects determine RB formats, independently. Our results have been written as if there is a single RB. Therefore, not all results will have equal application or relevance.

Concluding Remarks
Our hope is that the results of the manuscript are useful to those involved in updating and revising the 4-H Record Book. Speaking as the first author, in addition to engaging in PYD research, I have been involved in RBs for a number of years (as a former 4-Her and as the RB coordinator for my county). That said, I was surprised by a number of the emerging categories in our CQR category structure and the results have caused me to think of the RB in new ways – both in renewed support for the RB as a PYD intervention and also in ways that the RB might be revised. We hope the results are similarly useful to those who read and review the study.

Acknowledgements: Special thanks to the members of the Qualitative Research Methods class who conducted interviews and participated in preliminary data analysis (Marisa Bossen, Bobby Bullock, Jim Jenkins, Robleh Kirce, Hilary Roche, Josh Weaver, Kira Wenzel). We thank all of the 4-H faculty, staff, volunteers/leaders, parents, and alumni for participating in this project. We offer special thanks to Jana Ferris, 4-H Youth Development Educator, Washington State University Extension and Linda “Jo” Turner, Foundation Relations, National 4-H Council for their unlimited support for and encouragement of this project.

References


## Appendix

### Table 1
CQR Frequency Table

<table>
<thead>
<tr>
<th>Domain/Category/Subcategory</th>
<th>Frequency Label/ N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total/21</td>
</tr>
<tr>
<td><strong>Belonging</strong></td>
<td></td>
</tr>
<tr>
<td>Belonging is prerequisite to RB success</td>
<td>Variant/8</td>
</tr>
<tr>
<td>A caring adult must be involved</td>
<td>Variant/5</td>
</tr>
<tr>
<td>RB is part of club work</td>
<td>Variant/4</td>
</tr>
<tr>
<td>RB fosters belonging when...</td>
<td>Typical/11</td>
</tr>
<tr>
<td>...a caring adult is involved</td>
<td>Variant/4</td>
</tr>
<tr>
<td>...the RB is part of club work</td>
<td>Variant/8</td>
</tr>
<tr>
<td>...the RB is shared with others</td>
<td>Rare/1</td>
</tr>
<tr>
<td>RBs could foster belonging if...</td>
<td>Variant/4</td>
</tr>
<tr>
<td>...technology were leveraged into the structure/process</td>
<td>Rare/2</td>
</tr>
<tr>
<td>...the RB included more explicit questions about relations with others</td>
<td>Variant/3</td>
</tr>
<tr>
<td>...caring adults had RB training</td>
<td>Rare/1</td>
</tr>
<tr>
<td>RB documents belonging elsewhere in 4-H</td>
<td>Rare/2</td>
</tr>
<tr>
<td>4-H in general (but not the RB) fosters belonging</td>
<td>Variant/6</td>
</tr>
<tr>
<td>RB does not foster belonging</td>
<td>Rare/2</td>
</tr>
<tr>
<td><strong>Mastery</strong></td>
<td></td>
</tr>
<tr>
<td>The mastery of record keeping skills has broad and positive application</td>
<td>Typical/10</td>
</tr>
<tr>
<td>RBing facilitates the mastery of record keeping skills</td>
<td>Variant/6</td>
</tr>
<tr>
<td>RBing skills are transferable and expandable</td>
<td>Variant/6</td>
</tr>
<tr>
<td>Skills obtained from RBing are directly transferable to post 4-H applications</td>
<td>Variant/3</td>
</tr>
<tr>
<td>RBing facilitates mastery of project skills by amplifying the experiential learning model.</td>
<td>Typical/14</td>
</tr>
<tr>
<td>The RB extends the experiential learning process</td>
<td>Typical/10</td>
</tr>
<tr>
<td>The RB promotes reflection beyond the experiential model</td>
<td>Typical/11</td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td></td>
</tr>
<tr>
<td>RBing independently is a gradual process</td>
<td>Variant/5</td>
</tr>
<tr>
<td>RB fosters independence...</td>
<td>Typical/17</td>
</tr>
<tr>
<td>...through the goal setting, monitoring, and appraising process</td>
<td>Typical/11</td>
</tr>
<tr>
<td>...when it is completed independently</td>
<td>Typical/12</td>
</tr>
<tr>
<td>...when there is room for individualization</td>
<td>Variant/6</td>
</tr>
<tr>
<td>...by providing a long view</td>
<td>Typical/12</td>
</tr>
<tr>
<td>...for those who are wired for it</td>
<td>Variant/4</td>
</tr>
<tr>
<td>Generosity</td>
<td>Variant/6</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>RB contributes to generosity through reflection</td>
<td>Variant/6</td>
</tr>
<tr>
<td>RB documents generosity elsewhere in 4-H</td>
<td>Variant/7</td>
</tr>
<tr>
<td>4-H in general (but not the RB) fosters generosity</td>
<td>Variant/5</td>
</tr>
</tbody>
</table>

Note. *N* = 21. For the total sample (i.e., leaders and alumni combined), the frequency descriptor “General” means that the core idea is applicable to 19 or more of the participants (90%); “typical” means that it is applicable to more than half of the participants (10 to 18); “variant” means that it was applicable to up to half of the participants (3 to 9). “Rare” means that it applies to one or two cases.

For the leader subsample: “General” applies to 13 or more participants; “typical” applies from 6 to 12; “variant” applies from 2 to 5; “rare” applies to 1 participant.

For the alumni subsample, “General” applies to all 6 or more participants; “typical” applies from 3 to 5; “variant” applies from 2 to 3; “rare” applies to 1 participant.