

4-H Common Measures 2.0: *General User's Guide and Protocol*



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Overview & Purpose

The *Common Measures* are a set of self-report surveys used to describe youths' 4-H experiences and evaluate the effect of 4-H programming. To date, the Common Measures battery consists of twelve instruments and a demographics survey. Instruments correspond to the outcome areas of Science, Healthy Living, Citizenship, and College & Career Readiness, aspects of character considered to be influenced by the 4-H experience, and youths' 4-H experience. The major purposes of the 4-H Common Measures are to (a) describe youths' 4-H experiences, (b) evaluate 4-H programming, and (c) inform professional development practices.

IRB Protocol Suggestion:

The *Common Measures* are a battery of instruments developed with the primary goals of evaluating 4-H programming, informing program improvement efforts, and assessing overall program impact (National 4-H Council, n.d.).

Survey Design

Target Population

Common Measures instruments are designed for youth in grades 4-12 (approximately ages 9 to 18), who have participated in a 4-H program, project, or grant. It is recommended youth be given the measure(s) associated with their area(s) of enrollment and meet certain programming hour minimums. It is recommended that youth have a minimum of 6 participation (contact) hours before they are administered the *Common Measures* instruments.

Some modules are designed for use with older youth in grades 8-12. These include the three College & Career Readiness modules and the Science & Engineering Skills module. There are two reasons why these are for youth in grades 8-12. One reason is because the content is designed to be most relevant for youth in high school, although youth in 8th grade may also be given these questions if the content is relevant to their 4-H experience. The other reason is because rather than being phrased in the form of questions, the instrument may contain items (statements) with agreement scales. Although items work well with older youth, they typically confuse younger youth in grades 4-7.

Several questions on the *Common Measures* directly ask youth to provide their opinion on their 4-H experience, so data quality will be enhanced when youth understand they are part of 4-H. For instance, youth who are part of 4-H may not understand that “4-H” could mean Extension Office programming. An administration script has been provided with this protocol to help orient youth to this aspect (see Appendix A). Even with the orientation script, it is up to the survey administrator to use their discretion as to whether certain questions are appropriate for youth in their program. For instance, for clubs where 4-H is not the primary sponsor, youth may not relate to questions on the 4-H Experience scale or questions asking about the role 4-H played in their learning/interest. In these instances, it may not be appropriate to administer these types of questions to youth even if the minimum number of participation (contact) hours has been met.

At the current time, instruments are designed for youth who are part of 4-H, but future work could be conducted to adapt the current measures for use with non-4H youth.

IRB Protocol Suggestion:

The target population in [PROGRAM/EVENT or GRANT NAME] includes [NUMBER] youth [AGE or GRADE RANGE] who participated in [PROGRAM/EVENT or GRANT NAME]. [Add a comment here noting whether a particular gender will be purposely sampled or if both genders will be sampled equally]

Recruitment

Recruitment needs will vary based on the intended use(s) of *Common Measures* data. Regardless of the intended use(s) for the data, recruitment plans need to clearly outline who will be recruited (e.g., number, age, gender/racial groups) and how they will be recruited. Below are some example statements that can be used to describe potential recruitment plans.

IRB Protocol Suggestion:

Recruitment and participation of youth involved in [PROGRAM/EVENT or GRANT NAME] will take place at [LOCATION and/or LAND GRANT UNIVERSITY]. [Describe access to youth and/or any specific recruitment strategies that will be used]

If collecting a sample of all youth:

All youth participating in [PROGRAM/EVENT or GRANT NAME] will be asked to complete the [OUTCOME AREA] *Common Measures* instrument. [Add a comment noting whether particular groups (e.g., gender, racial) will be purposely sampled or if groups will be sampled equally]

If collecting a purposeful sample of youth:

A purposeful sample of [NUMBER] youth participating in [PROGRAM/EVENT] will be asked to complete the [OUTCOME AREA] *Common Measures* instrument. [Add a comment noting whether a particular gender will be purposely sampled or if both genders will be sampled equally] A purposeful sample will be recruited because [EXPLANATION]. Subsequently, our purposeful sample will include [SAMPLE INFORMATION].

Sampling

There is no prescribed sampling plan to administer the *Common Measures* within 4-H and sampling needs will vary based on the intended use(s) of *Common Measures* data. Please note that the type of sample included in your study/evaluation will influence the generalizability of your findings. That is, if you sample high school males involved in engineering-related activities then the results will generalize only to other high school males involved in engineering (pending on size of your sample). Below are some example statements that can be used to describe the intended sampling plan.

IRB Protocol Suggestion:

If collecting a convenience sample of all youth:

Sampling of [NUMBER] youth involved in [PROGRAM/EVENT or GRANT NAME] will take place at [LOCATION and/or LAND GRANT UNIVERSITY] and will be based on convenience. All youth participating in [PROGRAM/EVENT or GRANT NAME] will be eligible to complete the [OUTCOME AREA] *Common Measures* instrument.

NOTE: Depending on your IRB it may be helpful to outline circumstances related to the need to collect only a convenience sample. Some aspects can include but are not limited to ability to recruit participants, meeting space logistics, and/or general time constraints (e.g., time of day or week).

If collecting a purposeful sample of youth:

A purposeful sample of [NUMBER] youth [DETAILS OF SAMPLE] participating in [PROGRAM/EVENT or GRANT NAME] will be asked to complete the [OUTCOME AREA] *Common Measures* instrument. The goal of our study is to gather data on the [OUTCOME AREA] *Common Measures* instrument from a purposeful sample of youth

participating in [PROGRAM/EVENT] in [LOCAL, REGIONAL, STATE or NATIONAL area].

Research Design

In addition to informing program improvement efforts, a major goal of the *Common Measures* is to assess overall program impact. The type of research design plays a major role in the ability to assess impact. Below we provide protocol information on two of the most likely research designs that will be used with the *Common Measures* instruments—the one-group pretest-posttest design and the one-group posttest-only design. If these designs do not fit your needs, we recommend referring to Shadish, Cook, and Campbell (2002) for more detail about potential research designs.

IRB Protocol Suggestion

One-group posttest-only design:

For the current [STUDY/EVALUATION], the [SURVEY ADMINISTRATOR] will administer the *Common Measures* once to a sample of youth. Data will be collected after youth complete their participation in [PROGRAM/EVENT or GRANT NAME]. It is estimated that data collection will occur about [TIME PERIOD].

NOTE: An example score interpretation for this type of design is, “On average, 4-H youth in this sample had positive attitudes toward community understanding and engagement.” Another potential reporting option is, “Greater involvement in 4-H each week is associated with greater interest in helping others.”

One-group pretest-posttest design:

For the current [STUDY/EVALUATION], the [SURVEY ADMINISTRATOR] will administer the *Common Measures* twice to a sample of youth. Data will be collected [TIME PERIOD 1 (before/at the start)] youth participate in [PROGRAM/EVENT or GRANT NAME] and once again after youth complete their participation in [PROGRAM/EVENT or GRANT NAME]. It is estimated that the initial data collection will occur between [TIME PERIOD 1] and the second data collection will occur between [TIME PERIOD 2 (the end of program/project/grant)]. Data collected from youth at both time points will be assigned an identification number so scores from each time point can be linked.

NOTE: An example score interpretation for this type of design is, “On average, youth had more positive attitudes toward community understanding and engagement after participating in 4-H [program/activity/grant].”

Data Collection Procedures

Timing

Common Measures instruments were designed to be administered during a single occasion (one-group posttest-only research design), although it is possible to administer the same instrument across multiple time points (e.g., one-group pretest-posttest research design). Regardless of type of design (i.e., pretest/posttest or posttest only), it is recommended that posttest data be collected at the conclusion of a 4-H program, project, or grant.

Youth will need approximately 10-20 minutes to complete the instruments, however time estimates may vary depending on the age(s) of the youth and number of questions. For instance, younger youth generally require 1.5 times as much time to complete a task than older youth. With very long surveys, younger youth may lose motivation to complete the forms or may provide poorer quality data.

We recommend survey administrators use their discretion when determining how long it will take youth to complete the instruments and whether it may be advised to stagger the administration with certain youth. For instance, younger youth may need to have the *Common Measures* instrument broken out into smaller pieces that are given across several occasions if instrument length is a concern. This way, younger youth would take a 5-minute survey during three occasions rather than a 10-20-minute survey at one occasion. If this staggered approach is needed, survey administrators need to make sure each youth is assigned an ID number to link instruments across occasions.

IRB Protocol Suggestion

It is anticipated youth will need approximately 10-20 minutes to complete the *Common Measures* instruments. [If necessary provide additional detail as to whether youth will be able to complete the instrument during one occasion or if multiple occasions are needed]

Informed Consent and Youth Assent

Requirements for parental and youth consent are regulated by each Land Grant University's institutional review board (IRB). Most institutions will require a form of parental consent as well as youth assent. There are generally two types of parental consent situations one may encounter—waiver of parental consent or without waiver of parental consent. Example information for each of these situations is presented below.

At a minimum, parental informed consent and youth assent forms need to include a general description of the *Common Measures* (e.g., purpose); assurances of confidentiality and privacy; anticipated risks and benefits; and a place to sign indicating assent. Sample forms are available for the *Common Measures* from <http://www.4-h.org/resource-library/common-measures/>.

IRB Protocol Suggestion

Waiver of Parental Consent- Opt Out Option:

Youth participating in [PROGRAM/EVENT or GRANT NAME] will be asked to provide assent prior to completing the [OUTCOME AREA] *Common Measures* instrument.

Parents/guardians will also be informed of data collection activities a minimum of one week prior to the anticipated data collection date. [Explain how you will notify parents] Parents will be given the opportunity to decline participation for their youth by contacting the [PRIMARY INVESTIGATOR] prior to survey administration.

Without a Waiver of Parental Consent:

Youth participating in [PROGRAM/EVENT or GRANT NAME] will be asked to provide assent prior to completing the [OUTCOME AREA] *Common Measures* instrument. [Explain how you will notify parents] [LEADER/GRANT MANAGER] will collect signed informed consent from parents/guardians prior to the survey administration date. Only those youths with a signed parental consent form will be allowed to participate in the data collection activities.

Mode of Administration

The *Common Measures* are designed for self-administration so youth can complete the instruments independently. Currently, two administrative modes are available: computer-based using the Qualtrics survey platform and traditional paper-and-pencil methods. The choice of mode is up to the survey administrator.

IRB Protocol Suggestion

Paper-and-Pencil:

Data will be collected from youth by [SURVEY ADMINISTRATOR] using paper-and-pencil methods. [SURVEY ADMINISTRATOR] will provide youth with an instrument packet and ask youth to complete the packet. Upon completion the [SURVEY ADMINISTRATOR] will instruct youth to place their survey packets in a large envelope. Once all survey packets are collected the [SURVEY ADMINISTRATOR] will then seal the envelope in front of youth. Only a limited number of individuals will have access to the data [LIST INDIVIDUALS HERE] because [DATA MANAGEMENT/STORAGE DESCRIPTION]. (Additional comments needed outlining methods that will be used to upload data onto Qualtrics platform.)

Qualtrics:

Data will be collected and housed on a Qualtrics platform licensed by [UNIVERSITY]. To gain access to the survey, [SURVEY ADMINISTRATOR] will provide youth with an anonymous survey link that will direct them to the youth assent form and survey. IP addresses will not be collected from participants. Access to the Qualtrics is password protected so only a limited number of individuals will have access to the raw data. [LIST INDIVIDUALS HERE] (If downloading the data additional detail needs to be provided that describes who has access to this data and how the data will be managed.)

Selecting Instruments for Administration

The *Common Measures* have been designed to be modular. As such, there are multiple instruments available and instruments are designed to build on each other to create a larger survey. *The complete list of modules available is provided below.*

Common Measures Modules
<ul style="list-style-type: none">• 4-H Experience (grades 4-12)• Citizenship (grades 4-12)• College & Career: Professionalism (grades 8-12)*• College & Career: Career (grades 8-12)*• College & Career: College (grades 8-12)*• Demographics (grades 4-12)• Healthy Living: Food Choices (grades 4-12)• Healthy Living: Food Preparation (grades 4-12)• Healthy Living: Physical Activity (grades 4-12)• Healthy Living: Risk Prevention (grades 4-12)• Science (grades 4-12)• Science: Science & Engineering (grades 8-12)**• Universal (grades 4-12)

*College & Career Readiness and Science: Science & Engineering have been designed for use with grades 8-12.

**In addition to the age requirements for Science: Science & Engineering, it is recommended that youth been explicitly taught the scientific method or the engineering design process in order to complete these questions.

When creating a survey there are some points to keep in mind. First, it is important to remember that questions on the *Common Measures* should not be altered. Altering questions from the original instrument (e.g., changing the wording) will limit the generalizability of the findings and prevent the findings from being aggregated with other results. Second, we strongly encourage individuals to administer all of the questions within a set module (e.g., Science) because questions have been developed and tested as a unit using these modules. Users can use the accompanying reference table (Appendix C) and concept maps (Appendix D) to determine the appropriate outcome areas.

A decision tree document has been provided in Appendix B to help individuals determine the right combination of instruments to include in their data collection activities. As shown in the decision tree (Appendix B), instruments are a combination of the following formula:

4-H Experience + Universal + Content Area + Demographics

The only required instrument within this formula is the demographics instrument. Survey administrators have the ability to choose whether they will administer all possible instruments (i.e., 4-H Experience, Universal, Outcome Area and Demographics) or only a single content instrument with demographics (i.e., Outcome Area and Demographics).

If the survey administrator wishes to collect data using the 4-H Experience instrument, there are additional questions that need to be considered to determine if the instrument is appropriate for the sample. To determine if the 4-H Experience instrument should be used, survey administrators need to answer the following set of questions:

- “Would youth identify as members of a 4-H or 4-H sponsored group?”
 - AND
 - “Have youth been involved with 4-H or a 4-H sponsored group for 6 hours or more?”
- If the answer to both questions is “Yes” → Include the “4-H Experience” instrument
 - If either answer is “No” → Do not include the “4-H Experience” instrument

Administration

Survey Administrator. It is recommended that an impartial individual (e.g., county agent, different program/club leader) administer the *Common Measures* to youth. To maintain confidentiality and encourage honest answers, it is necessary to assure youth that their individual answers will not be seen by their 4-H leader or parents. When using a pretest-posttest design, we also recommend the use of identification numbers to match youths’ pretest and posttest responses, instead of writing youths’ names on surveys. The identified survey administrator will need to read the directions to youth and collect youth responses. The recommended steps for administration are detailed below.

- **Step 1:** The survey administrator should read the standard script (see Appendix A) out loud before youth begin the survey. The standard script provided in Appendix A describes the purpose of the *Common Measures* and assures youth that their 4-H leaders and parents will not have access to their answers. As seen in the script, there are areas where the leader can provide specific information (e.g., name of the club or event) to help youth better understand what is meant when the survey refers to “4-H.”
- **Step 2 (Paper-and-pencil administration):** The Survey Administrator hands out the *Common Measures* and writing utensils and asks youth to complete them. The Survey Administrator should also instruct youth to place their completed instruments in a large envelope. Youth should be arranged such that their answers are not visible to others. At least 20 minutes should be allowed for youth to complete the instruments. The Survey Administrator may either stay in the same room to answer questions or be available in a nearby room. When all youth are finished, the survey administrator should seal the envelope in front of the youth.
- **Step 2 (Qualtrics administration):** It is recommended that the leader ask youth about their general familiarity with a computer prior to administering a survey via Qualtrics. In some cases, younger youth may not be as familiar so it is important to ascertain if there are any youth who are not familiar with using a computer. Youth who are less familiar with computers should be given a paper-and-pencil version. Once the administrator has ascertained general computer ability, youth are then asked to complete the *Common*

Measures. When all youth are done, the survey administrator should ensure all computers have been logged out.

When using Qualtrics to collect data, it is recommended that administration occur in a room where computers and other devices can be arranged so responses on the screen are not visible to others. If *Common Measures* are administered in a classroom or computer lab, youth should be spaced five (5) feet apart. Physical proximity to peers has been shown to reduce the reporting of sensitive behaviors (Beebe et al., 1998).

Data Management

Data Entry

When using paper-and-pencil, an authorized survey administrator (e.g., county agent, primary investigator) who is not the individual 4-H leader, should perform data entry. Data collected using the paper-and-pencil mode will need to be transferred to the Qualtrics platform by using individual survey links or uploading a CSV file (see *Common Measures* FAQ for more information). Once data entry and data checking have been completed, the paper surveys should be destroyed.

Data Security

Completed paper surveys and electronic data must be kept in a secure environment to avoid violations of confidentiality agreements. Access to data should be limited to designated administrators and Qualtrics account managers at each Land Grant University.

To protect youth confidentiality, 4-H leaders should not be given individual responses which could potentially identify individual youth. Instead, it is recommended that leaders be given only descriptive statistics of aggregate group results. Access to data with identifying information should be strictly limited to authorized users.

IRB Protocol Suggestion

No information obtained in this [evaluation/study] will identify an individual child. Demographic information will be collected from youth but information does not include personally identifiable information. Data collected by paper-pencil methods will be transferred to the Qualtrics platform by [DESIGNATED INDIVIDUAL]. Once data entry and data checking are complete, paper versions will be destroyed.

All data will be housed on the password-protected Qualtrics Platform. Only a limited number of individuals will have access to the Qualtrics platform. [List individuals and/or mention staff providing support to *Common Measures* data collection at the National 4-H Council.] Those with access to Qualtrics data must not report data at the individual level or report cross-tabulations of data that might result in the identification of individual youth.

Reporting

Scoring

All questions from the content outcome areas (i.e., Science, Healthy Living, Citizenship, and College & Career Readiness) and demographic measure are designed to be reported individually. That is, no scoring rules are necessary to report these types of questions.

There are sets of questions within the *Common Measures* that comprise a scale, so these questions must be scored and reported as a total score. These question sets are found on the Universal (“Learning About You”) and the 4-H Experience (“Your 4-H Experience”) instruments. Scoring information for each of these instruments is provided below.

Universal. This scale contains some negatively worded questions (UN2, UN12 & UN17) that are not used for scoring purposes. Only positively worded questions are used for creating sub-scores and total scores on the Universal measure. For questions UN1, UN3-11, UN13-16, and UN18-23, “Yes” will be assigned a value of “4”; “Usually” assigned a “3”; “Not Really” assigned a “2”; and “No” assigned a “1.”

4-H Experience. This scale contains some negatively worded questions (EX3 & EX12) that are not used for scoring purposes. Only positively worded questions are used for creating sub-scores and total scores on the Universal measure. For questions EX2, EX4-11, and EX13-16, “Yes” will be assigned a value of “4”; “Usually” assigned a “3”; “Not Really” assigned a “2”; and “No” assigned a “1.”

Interpretation

General Interpretation

Youth responding to the Common Measures constitute a nonprobability sample. As such, interpretations about the 4-H youth who have completed the Common Measures cannot be generalized to youth who have not completed the Common Measures. Interpretations are therefore limited only to 4-H who have completed the Common Measures in the current year. When reporting results, care must be taken to specify the population responding. Some sample statements are provided below as examples:

- *When asked, ‘At 4-H, did you learn about needs in your community?’ 80% of youth who responded said “Yes,” 15% said “Sort of,” and 5% said “No.”*

Interpretation of scale scores

Users have the option of reporting the subscale (Personal Mindset, Social Skills) or total scores for the Universal scale and the total score for the 4-H Experience scale. Directions for scoring for each option are provided below.

The sections below also provide some suggestions for reporting. We acknowledge that the suggestion for using labels to describe the average scores (e.g., “Developing,” “Intermediate”) are arbitrary and need further evaluation. Yet, we realize this option may offer a potential alternative reporting method that may be easier for some to understand the underlying meaning of the summary scores.

Universal: Personal Mindset. *Personal Mindset items include UN1, UN3-10, and UN21. Users can report either a total score for this subscale or an average score. It is recommended that total scores not be reported for individuals who have more than 80% of the items missing. Total scores will range from 10 (Needs work) to 40 (Advanced). An alternative method for reporting scores is to take an average of the 10 questions to provide a more general indication of Personal Mindset skill development. A potential way of describing the average scores is to describe scores close to “1” and “2” indicate youths’ as “Developing,” averages close to “3” as “Intermediate,” and averages close to “4” as “Advanced.” By calculating an average response across the questions within a scale, it will be possible to report:*

- Across personal mindset questions, average responses indicate that 30% of 4-H youth have *Developing* skills, 50% have *Intermediate* skills, and 20% have *Advanced* skills.

This information can also be reported by age or number of years in 4-H to demonstrate patterns of Developing/Intermediate/Advanced skills across multiple demographic characteristics.

Universal: Social Skills. *Social skills items include UN11, UN13-200, and UN22-23. Users can report either a total score for this subscale or an average score. It is recommended that total scores not be reported for individuals who have more than 80% of the items missing. Total scores will range from 10 (Needs work) to 40 (Advanced). An alternative method for reporting scores is to take an average of the 10 questions to provide a more general indication of Social Skills development. A potential way of describing the average scores is to describe scores close to “1” and “2” indicate youths’ as “Developing,” averages close to “3” as “Intermediate,” and averages close to “4” as “Advanced.” By calculating an average response across the questions within a scale, it will be possible to report:*

- Across social skills questions, average responses indicate that 30% of 4-H youth have *Developing* skills, 50% have *Intermediate* skills, and 20% have *Advanced* skills.

Universal: Total Score. *Universal items include UN1, UN3-11, UN13-16, and UN18-23. Users can report either a total score for this subscale or an average score. It is recommended that total scores not be reported for individuals who have more than 80% of the items missing. Total scores will range from 20 (Needs work) to 80 (Advanced). An alternative method for reporting scores is to take an average of the 20 questions to provide a more general indication of Universal skill development. A potential way of describing the average scores is to describe scores close to “1” and “2” indicate youths’ as “Developing,” averages close to “3” as “Intermediate,” and averages close to “4” as “Advanced.” By calculating an average response across the questions within a scale, it will be possible to report:*

- Across Universal questions, average responses indicate that 30% of 4-H youth have *Developing* skills, 50% have *Intermediate* skills, and 20% have *Advanced* skills.

4-H Experience. Users can report either total (sum) of the 13 questions or an average score. It is recommended that total scores not be reported for individuals who have more than 80% of the items missing. Total scores will range from 13 (Low) to 52 (High).

Alternatively, an average of the 13 questions can be taken to provide a more general indication of the youths' perceptions about their 4-H experiences. Average scores close to "1" and "2" indicate youths' perceptions of their 4-H Experience are "Low," averages close to "3" are "Intermediate," and averages close to "4" are "High." By calculating an average response across the questions within a scale, it will be possible to report:

- Across Universal questions, average responses indicate that 30% of 4-H youth have *Developing* skills, 50% have *Intermediate* skills, and 20% have *Advanced* skills.

References

- Beebe, T. J., Harrison, P. A., Mcrae, J. A., Anderson, R. E., & Fulkerson, J. A. (1998). An evaluation of computer-assisted self-interviews in a school setting. *Public Opinion Quarterly*, 62(4), 623-632.
- National 4-H Council. (n.d.). *4-H Common Measures*. Retrieved from <http://www.4-h.org/resource-library/common-measures/>
- Shadish, W.R., Cook, T.D., & Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, Houghton-Mifflin.

Appendix A: Administration Script

Directions to Read Out Loud

Today we are going to take a survey about your experiences in [program/club/grant name].

You are being given this survey because [program/club/grant name] is a part of 4-H and 4-H would like to learn about your experiences in [program/club/grant name].

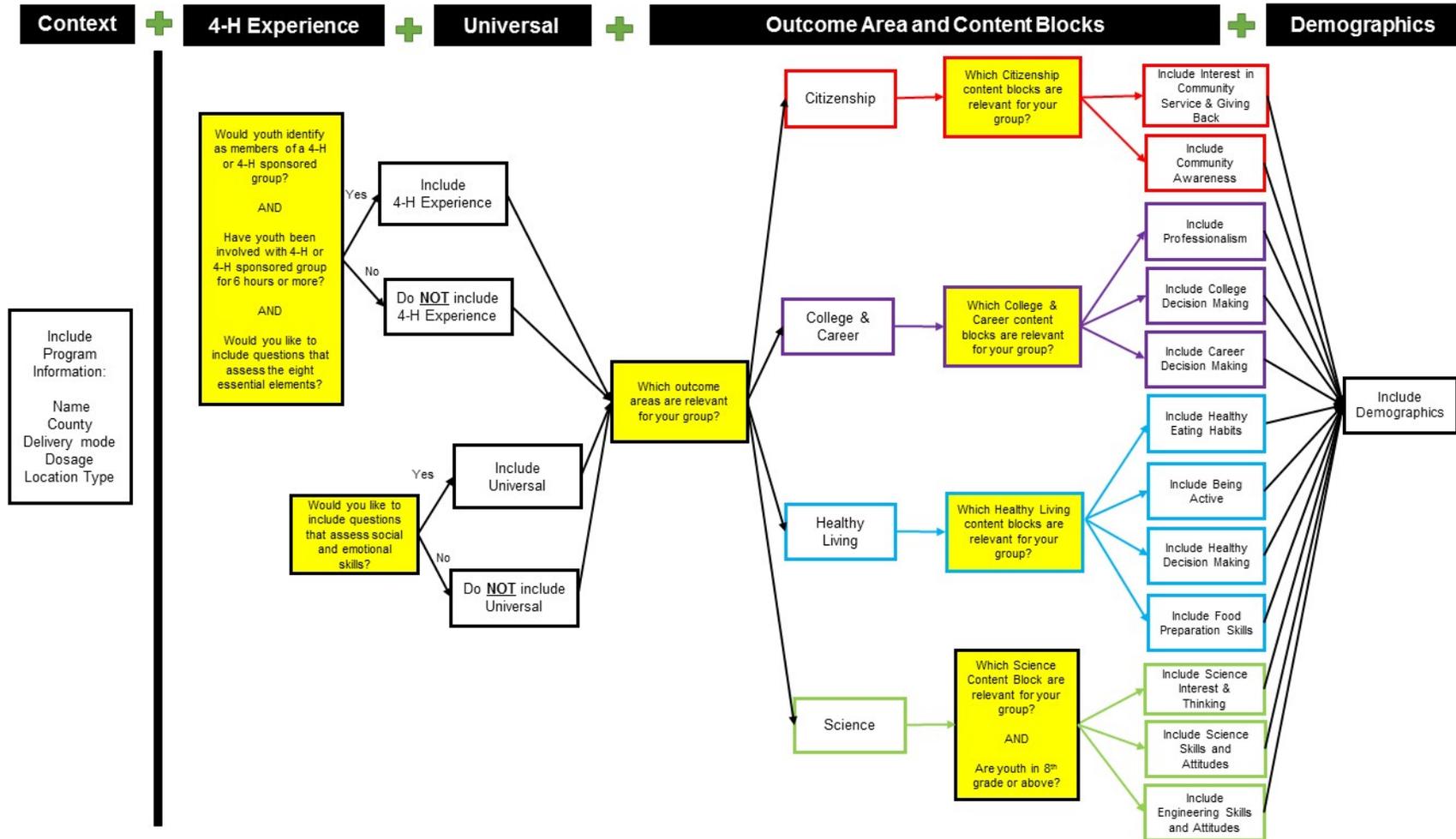
Your answers are important and they will be kept private. But, if you don't want to fill out the survey, you don't have to. If there is a question you don't want to answer, you can leave it blank.

There are no right or wrong answers, so please answer all questions honestly.

Remember, [program/club/grant name] is part of 4-H, so when a question asks about 4-H, think about [program/club/grant name].

Appendix B: Decision Tree

Building the right Common Measures survey for your program



Appendix C: Reference Tables

Common Measures 2.0 Reference Table

4-H Experience <i>(Note, this instrument cannot be broken apart, all questions must be used)</i>			
Content Block	Outcome	Indicator	Question
Your 4-H Experience	Contextual information		EX 1: How many years of 4-H have you completed?
	4-H Experience (Total Alpha Score = .844)	Summary score demonstrating aspects of the eight essential elements: 1) positive relationship with a caring adult; 2) inclusive environment; 3) safe environment; 4) engagement in learning; 5) opportunity for mastery; 6) opportunity to see oneself as an active participant in the future; 7) opportunity for self-determination; 8) opportunity to value and practice service for others.	EX 2: Is 4-H a place where adults care about you? EX 4: Is 4-H a place where others like you? EX 5: Is 4-H a place where you feel safe? EX 6: Is 4-H a place where you get to figure things out for yourself? EX 7: Is 4-H a place where it's okay for you to make mistakes? EX 8: Is 4-H a place where you get to teach others what you've learned? EX 9: Is 4-H a place where you get to do things that you like? EX 10: Is 4-H a place where you're encouraged to plan for your future? EX 11: Is 4-H a place where you get to choose what you want to do? EX 13: Is 4-H a place where you have a chance to be a leader? EX 14: Is 4-H a place where you learn about ways to help your community? EX 15: Is 4-H a place where you feel you belong? EX 16: Is 4-H a place where you get to help make group decisions?
	NA	Negatively worded items to encourage deeper processing and decrease straight-lining behaviors. These items are not included in the total score.	EX 3: Is 4-H a place where you feel left out? EX 12: Is 4-H a place where adults make the decisions?

Universal (Note, this instrument cannot be broken apart, all questions must be used)

Content Block	Outcome	Indicator	Question
Learning About You	Personal Mindset	Youth will demonstrate the social and emotional skills (e.g., character, growth mindset, persistence, decision-making and ethics) necessary for academic or workplace success.	UN 1: Do you like to learn new things? UN 3: Do you try to learn from your mistakes? UN 4: Are you willing to work hard on something difficult? UN 5: Before making a decision, do you stop to think about your choices? UN 6: Do you think about how your choices affect others? UN 7: Do you set goals for yourself? UN 8: Do you keep trying until you reach your goals? UN 9: Do you treat others the way you want to be treated? UN 10: Do you follow the rules even if no one is watching? UN 21: Are you willing to try something you might get wrong?
	Social Skills	Youth will demonstrate social and leadership skills (e.g., ability to communicate through multiple methods, value and respect for other cultures) essential for academic and workplace success	UN 11: Do you help others reach their goals? UN 13: Do you show respect for others' ideas? UN 14: Are you comfortable working in groups? UN 15: Do you think about other people's feelings before you say something? UN 16: Do you look for ways to involve all members of a group? UN 18: Do you get along with others who are different from you? UN 19: When someone makes you upset, can you still work with them? UN 20: Do you like to learn about people who are different from you? UN 22: Are you comfortable being a leader? UN 23: Is it easy for you to speak up in a group?
	Universal Skills (Total Alpha Score = .811)	Youth will demonstrate the social, emotional, character, and leadership skills necessary for academic or workplace success.	UN 1, UN 3-11, UN 13-16, UN 18-23
	NA	Negatively worded items to encourage deeper processing and decrease straight-lining behaviors. These items are not included in the total score.	UN 2: Are you afraid to try something you might get wrong? UN 12: Is it hard for you to be a leader? UN 17: Do you have a hard time speaking up in a group?

Citizenship

Content Block	Outcome	Indicator	Question
Interest in Community Service & Giving Back	Engagement in community and engagement with community issues	Youth will maintain future intentions for civic engagement.	<p>CS 1: Do you like helping people in your community?</p> <p>CS 2: Are you interested in a community service project where you would organize a drive for clothing, toys, books or food?</p> <p>CS 3: Are you interested in a community service project where you would serve meals at a homeless shelter?</p> <p>CS 4: Are you interested in a community service project where you would teach younger kids?</p> <p>CS 5: Are you interested in a community service project where you would pick up trash outside?</p> <p>CS 6: Are you interested in a community service project where you would walk dogs at an animal shelter?</p> <p>CS 7: Are you interested in a community service project where you would visit people in a nursing home?</p> <p>CS 8: Are you interested in a community service project where you would plan a fundraiser?</p>
	Understanding of the Democratic Process	Youth will increase their interactions with local, state and national government.	CS 9: Because of 4-H, did you meet leaders in your community?
	Contributions	Youth will make contributions to their peers, families and communities	CS 10: Have you encouraged others to volunteer in your community?
	Engagement in community and engagement with community issues	Youth participate in community service and volunteer.	<p>CS 11: Have you ever done a community service project?</p> <p>CS 12: Have you ever helped plan a community service project?</p> <p>CS 13: Have you ever led a community service project?</p> <p>CS 14: Tell us about your favorite community service project.</p>

NOTE: Bolded questions represent the core set of questions for that content block. Non bolded questions are supplemental questions.

Citizenship (cont.)

Content Block	Outcome	Indicator	Question
Community Awareness	Awareness of community and community issues	Youth will engage in discussion with others and be critical consumers of information.	CA 1: At 4-H, did you talk about needs in your community? CA 2: At 4-H, did you talk about needs across the country? CA 3: At 4-H, did you talk about needs around the world?
	Engagement in community and engagement with community issues	Youth participate in community service and volunteer. Youth will engage in civic involvement. Youth will maintain future intentions for civic engagement.	CA 4: When you learn about a problem in the community, do you look for ways to help? CA 5: When you learn about a problem across the country, do you look for ways to help? CA 6: When you learn about a problem around the world, do you look for ways to help? CA 7: Do you like helping people?* CA 8: Do you feel a responsibility to help your community? CA 9: How much has 4-H inspired you to volunteer in your community?

NOTE: Bolded questions represent the core set of questions for that content block. Non bolded questions are supplemental questions.

College and Career Readiness

Content Block	Outcome	Indicator	Question
Professionalism	Contextual information		PR 2: Do you currently have a job?
	Professional Communication	Youth will demonstrate professional communication appropriate to the academic and workplace context	PR 1: Have you ever applied for a job? PR 3: Do you have a résumé? PR 9: At 4-H, did you work on your résumé? PR 10: At 4-H, did you learn how to prepare for an interview? PR 11: At 4-H, did you do a mock interview? PR 12: At 4-H, did you learn how to act professionally? PR 13: At 4-H, did you talk about how to have a professional image on social media?
	Intrapersonal Skills	Youth will develop and demonstrate the social and emotional skills (e.g. ethics, conscientiousness, personal responsibility, collaborating across differences) necessary for academic or workplace success.	PR 4: Is it important to arrive on time for work? PR 5: Is it important for you to be trusted by an employer? PR 6: Is it important for you to do your job well? PR 7: Is it important for you to show respect for others? PR 8: Is it important to have a professional image on social media?
	Contributions	Youth will make contributions to their peers, families and communities	PR 14: Have you encouraged your friends to have a professional image on social media?
College Decision Making	Decision Making and Problem Solving – School/ College	Youth will make informed decisions about college aspirations that are personally meaningful	CG 1: Do you have an idea of what you would like to major in? CG 2: At 4-H, did you research colleges? CG 3: At 4-H, did you tour a college? CG 4: At 4-H, did you learn about scholarships? CG 5: At 4-H, did you learn about the college application process? CG 6: How much have you thought about how to pay for college? CG 7: Have you filled out the FAFSA (Free Application for Federal Student Aid)? CG 8: At 4-H, did you learn about colleges that might be a good fit for you? CG 9: How much has 4-H helped you in your decisions about college? CG10: Have you shared what you learned about preparing for college with others?

NOTE: Bolded questions represent the core set of questions for that content block. Non bolded questions are supplemental questions.

College and Career Readiness (cont.)

Content Block	Outcome	Indicator	Question
Career Decision Making	Decision Making and Problem Solving - Career	Youth will make informed decisions about career aspirations that are personally meaningful	<p>CR 1: When choosing a career, how important is it for you to live where you want?</p> <p>CR 2: When choosing a career, how important is it to be passionate about the work you do?</p> <p>CR 3: When choosing a career, how important is your salary?</p> <p>CR 4: How important is it to have a career where you can make a difference in the lives of others?</p> <p>CR 5: How much has 4-H helped you identify things that you are good at?</p> <p>CR 6: How much has 4-H helped you explore future career options?</p> <p>CR 7: As a result of 4-H, have you identified one or more careers that might be a good fit for you?</p> <p>CR 8: As a result of 4-H, do you have a better idea of what you might actually do after high school?</p> <p>CR 9: How much have you thought about the amount of education you might need in the future?</p> <p>CR 10: To have the type of career you want, how important is it for you to go to college?</p> <p>CR 11: Are you thinking about getting a job in the year after you finish high school?</p> <p>CR 12: Are you thinking about joining the military in the year after you finish high school?</p> <p>CR 13: Are you thinking about attending a community college in the year after you finish high school?</p> <p>CR 14: Are you thinking about attending a vocational or technical college in the year after you finish high school?</p> <p>CR 15: Are you thinking about attending a 4-year college in the year after you finish high school?</p>

NOTE: Bolded questions represent the core set of questions for that content block. Non bolded questions are supplemental questions.

Healthy Living

Content Block	Outcome	Indicator	Question
Healthy Eating Habits	Choose food consistent with the Dietary Guidelines	Youth will consume healthy foods such as: vegetables, fruits, whole grains, fat-free or low-fat milk and milk products, seafood, lean meats and poultry, eggs, beans and peas, and nuts and seeds Consume less unhealthy foods such as: sodium, solid fats, added sugars, and refined grains Follow healthy eating patterns such as: eating breakfast, eating as a family, making healthy snack choices, etc.	HE 1: Do you pay attention to how much fruit you eat each day? HE 2: Do you pay attention to how many vegetables you eat each day? HE 3: Do you pay attention to how much water you drink each day? HE 4: Do you pay attention to how many sugary drinks you drink each day? HE 5: Do you pay attention to the food label for the food you eat? HE 6: How often do you eat breakfast? HE 7: How often do you eat a meal with your family? HE 8: How often do you eat fast food? HE 10: At 4-H, did you learn about healthy food choices?
	Contributions	Youth will make contributions to their peers, families and communities	HE 9: Have you given your family ideas for healthy meals or snacks?
Being Active	Improve physical activity practices	Engage in 60 minutes or more of PA Reduce sedentary activity Youth will understand the benefits of PA	BA 1: Do you pay attention to how active you are each day? BA 2: Do you pay attention to how much time you spend in front of a screen (TV, computer, tablet, or smartphone)? BA 3: Do you get to decide how much time you spend in front of a screen (TV, computer, tablet, or smartphone)? BA 5: At 4-H, did you talk about ways to be active?
	Contributions	Youth will make contributions to their peers, families and communities	BA 4: Have you encouraged others to be active with you?
Healthy Decision Making	Avoid and prevent negative risk behaviors	Practice injury prevention behaviors such as: seatbelt use, helmet use, distraction-free driving, ATV use, bicycle, shooting sports safety, etc. Prevent and reduce ATOD use such as: practicing refusal skills, intervening to prevent use/abuse, etc. Understand the consequences of risk behaviors	HD 1: What do you think about someone else texting and driving a car? HD 2: What do you think about someone else your age riding a bike and not wearing a helmet? HD 3: What do you think about someone else your age not wearing a seat belt? HD 4: What do you think about someone else your age drinking alcohol? HD 5: What do you think about someone else your age smoking? HD 6: What do you think about someone else your age taking drugs? HD 8: At 4-H, did you talk about risky behaviors?

Healthy Living (cont.)

Content Block	Outcome	Indicator	Question
	Contributions	Youth will make contributions to their peers, families and communities	HD 7: Do you encourage your friends to make responsible choices?
Food Preparation	Food Preparation Skills	Youth will demonstrate a capacity for food preparation skills.	FP 1: Do you know how to follow a recipe to make something to eat? FP 2: Do you know how to make changes in a recipe? FP 3: Do you know how to use measuring cups and spoons? FP 4: Do you know how to use knives safely? FP 5: Do you know how to handle hot pots and pans safely? FP 6: Do you know how to keep your cooking area clean to stop spreading germs?

NOTE: Bolded questions represent the core set of questions for that content block. Non bolded questions are supplemental questions.

Science

Content Block	Outcome	Indicator	Question
Science Interest & Thinking	Interest and Engagement in Science	Youth will express interest and be engaged in Science related activities.	SC 1: Are you interested in learning about animal science? SC 2: Are you interested in learning about plant science? SC 3: Are you interested in learning about environmental science? SC 4: Are you interested in learning about robotics? SC 5: Are you interested in learning about engineering?
	Positive Attitudes and Aspirations toward Science	Youth will express positive attitudes about science. Youth will see science in their futures and recognize the relevance of science.	SC 6: How much do you like science?* SC 8: How much do you like engineering?* SC 7: Would you like a job that uses science?* SC 9: Would you like a job that uses engineering?*
	Develop Science Skills and Abilities	Youth will demonstrate a capacity for science process skills.	SC 10: Do you ask questions about how things work? SC 11: Do you try new things to see how they will work? SC 12: Do you look at how things are the same or different? SC 13: Do you compare how different things work? SC 14: Do you take things apart to see how they work? SC 15: Do you come up with ideas for how to build new things? SC 16: At 4-H, did you learn new things about science?* SC 17: At 4-H, did you learn new things about engineering?*
	Apply Learning	Youth will apply science skills to issues in their community.	SC 18: At 4-H, did you talk about how science can be used to solve everyday problems?
	Contributions	Youth will make contributions to their peers, families and communities	SC 19: Have you shared your science-related project with others?
Science Skills & Attitudes	Develop Science Skills and Abilities (8 th -12 th grade only)	Youth will demonstrate a capacity for science process skills.	SS 1: Do you know how to ask a hypothesis that can be tested? SS 2: Do you know how to plan an experiment? SS 3: Do you know how to analyze data to draw conclusion about a hypothesis? SS 4: Do you know how to communicate the results of an experiment to others?
	Positive Attitudes and Aspirations toward Science (8 th -12 th grade only)	Youth will express positive attitudes about science. Youth will see science in their futures and recognize the relevance of science.	SS 5: I like science. SS 6: I would like a job that involves using science. SS 7: I would like to study science after high school.

Based on your program, in the following pairs of questions (SC6 & SC8), (SC7 & SC9), and (SC16 & SC17) select either the Science version or the Engineering version to be included in the core.

Science (cont.)

Content Block	Outcome	Indicator	Question
Engineering Skills & Attitudes	Develop Engineering Skills and Abilities (8 th -12 th grade only)	Youth will demonstrate a capacity for engineering skills.	<p>ES 1: Do you know how to define an engineering design problem?</p> <p>ES 2: Do you know how to identify potential solutions to a design problem?</p> <p>ES 3: Do you know how to evaluate test results to identify the best solution?</p> <p>ES 4: Do you know how to communicate a design solution to others?</p>
	Positive Attitudes and Aspirations toward Engineering (8 th -12 th grade only)	<p>Youth will express positive attitudes about engineering.</p> <p>Youth will see science in their futures and recognize the relevance of engineering.</p>	<p>ES 5: I like engineering.</p> <p>ES 6: I would like a job that involves using engineering.</p> <p>ES 7: I would like to study engineering after high school.</p>

* Based on your program, in the following pairs of questions (SC6 & SC8), (SC7 & SC9), and (SC16 & SC17) select either the Science version or the Engineering version to be included in the core.

Demographics

Content Block	Outcome	Indicator	Question
Demographic	Contextual information		<p>D 1: How old are you?</p> <p>D 2: What grade are you in? <i>If it is summer break, which grade will you be starting in the fall?</i></p> <p>D 3: Which of the following best describes your gender?</p> <p>D 4: Which of the following best describes your race?</p> <p>D 5: How many hours do you typically spend on 4-H activities each week?</p> <p>D 6: Are you involved in 4-H at the county level?</p> <p>D 7: Are you involved in 4-H at the state level?</p> <p>D 8: Are you involved in 4-H at the national level?</p> <p>D 9: Was this survey easy to complete?</p> <p>D 10: Did you ask for help completing this survey?</p> <p>D 11: Why are you involved in 4-H?</p> <p>D 12: What has been the most interesting thing you have learned by being involved in 4-H?</p> <p>D 13: How might you be different if you had never been involved in 4-H?</p>

NOTE: Bolded questions represent the core set of questions for that content block. Non bolded questions are supplemental questions.



UNIVERSAL



Personal Mindset

Social Skills





CITIZENSHIP

Interest in Community Service & Giving Back

- Engagement in Community
- Understanding Democratic Process
- Contributions

Community Awareness

- Awareness of Community Issues
- Engagement in Community





COLLEGE & CAREER READINESS

Professionalism

- Professional Communication
 - Appropriate Communication
- Intrapersonal Skills
 - Social & Emotional Skills
- Giving Back
 - Contributions

Career Decision-Making

- Career
 - Career Aspirations

College Decision-Making

- School/College Decision-Making
 - College Aspirations
 - Contributions





HEALTHY LIVING

Healthy Eating

- Choosing Food
- Contributions

Being Active

- Physical Activity
- Contributions

Healthy Decisions

- Avoiding Risky Behaviors
- Contributions

Food Preparation

- Food Preparation Knowledge





SCIENCE

Science Interest & Thinking

- Interest in Science
 - Interest & Engagement
 - Positive Attitudes & Aspirations
- Science Thinking
 - Science Skills & Abilities
 - Applying Learning
 - Contribution

Science Skills & Attitudes

- Science Skills & Abilities
 - Science Process Skills
- Science Attitudes & Aspirations
 - Attitudes & Relevancy

Engineering Skills & Attitudes

- Engineering Skills & Abilities
 - Engineering Skills
- Engineering Attitudes & Aspirations
 - Attitudes & Relevancy

