Assessing Teamwork Using Student Self-Reflections:

Efforts to Design and Pilot a Locally Developed Instrument

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First, a show of hands…

- How many of you are from:
  - Public Institution?

  - Private Institution?

  - 2-year College?

  - 4-year University?

Institutional Profile

- 4-year, public university approximately 1-hour north of Houston, Texas

- Current enrollment over 20,000 undergraduate and graduate students
  ◦ 80+ bachelor's degree programs, more than
  ◦ 50+ master's degree programs, and
  ◦ 6 doctoral programs.

- Classified by the Carnegie Commission on Higher Education as a "Doctoral Research University" and a "Community Engaged" University
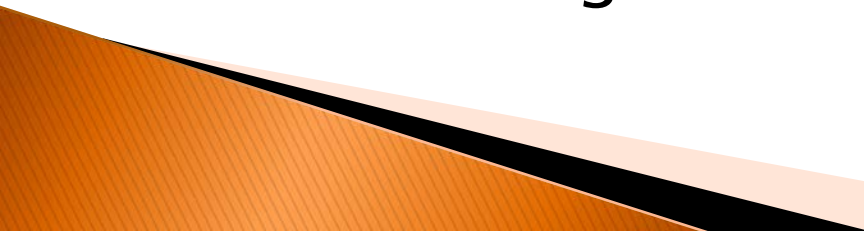
Background

- Director of Assessment inspired to create the Teamwork Self-Reflection Inventory (TSRI) at the Third Annual LEAP Texas Forum
  - In particular, efforts of UTSA to assess Teamwork using a peer- and self-evaluation rubric.

- At the same time, was troubled by a February 2016 AAC&U report
  - Report noted that only 7% of AAC&U member institutions who used the VALUE Rubrics reported using the rubric for Teamwork.
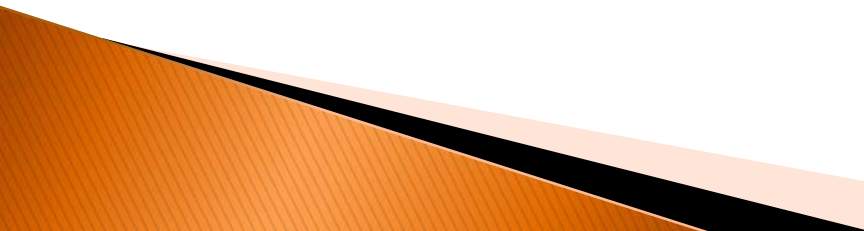   - (Hart Research Associates, 2016)

Lightbulb Moment!

Was inspired to try to convert the AAC&U Teamwork VALUE Rubric into a self-reflection instrument

Advantages to Modifying an Existing Instrument

- Why reinvent the wheel? Easier to rewrite rubric language than to create language from scratch.

- Cuts down some time/work on instrument development.

- Provides a conceptual base for your instrument, while at the same time customizing it for local use.

Disadvantages to Modifying an Existing Instrument

▸ Without significant revisions, you are locked into someone else's conceptual framework.

▸ Rubric domains/content may not align with your students or institution and may need significant revisions.

▸ Instrument may no longer be reliable or valid.

AAC&U Teamwork VALUE Rubric

TEAMWORK VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.)

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Contributes to Team Meetings	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the group.	Shares ideas but does not advance the work of the group.
Facilitates the Contributions of Team Members	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to meetings by restating the views of other team members and/or asking questions for clarification.	Engages team members by taking turns and listening to others without interrupting.
Individual Contributions Outside of Team Meetings	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work accomplished advances the project.	Completes all assigned tasks by deadline.
Fosters Constructive Team Climate	Supports a constructive team climate by doing all of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any three of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any two of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any one of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.
Responds to Conflict	Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	Identifies and acknowledges conflict and stays engaged with it.	Redirecting focus toward common ground, toward task at hand (away from conflict).	Passively accepts alternate viewpoints/ideas/opinions.

Teamwork Self-Reflection Instrument (TSRI)
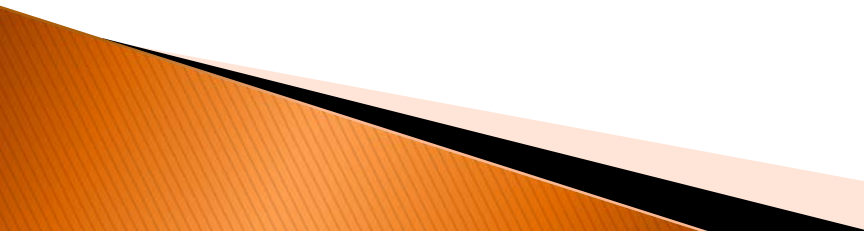
Name_____   SAM ID_____

TEAMWORK SELF-EVALUATION

<u>Instructions:</u> Reflect back on your past group experiences during your time at Sam Houston State University. Please use the check boxes below to mark all elements that you feel apply to you and your experiences when interacting in a team environment. There are no wrong answers, so please be as honest as you can in your self-reflection.

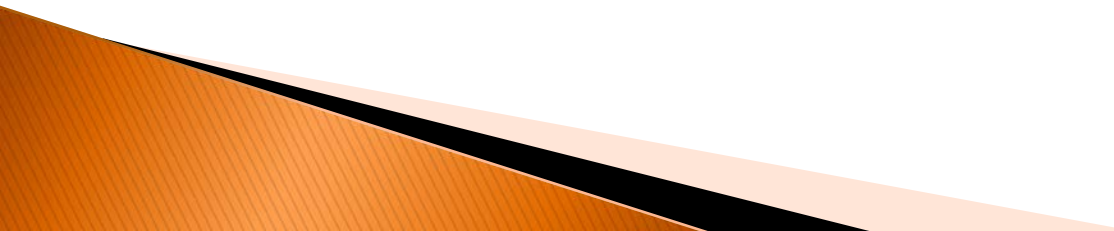|				
Contributions to Group Activities	☐ I only contribute what is required to complete the project or task. ☐ I almost always allow others to come up with ideas for completing the project.	☐ I may contribute some ideas and work to the group. ☐ I generally allow others to take the lead in completing the group project.	☐ I actively contribute ideas and work that advance the project. ☐ I make sure that my ideas are considered or used to complete the project.	☐ I help integrate the work and ideas of all group members to complete the project. ☐ It's less important to me who suggested ideas than whether those ideas help complete the project.
Contributions to Group Discussions	☐ I only participate in group discussions when required. ☐ I never lead the group discussion. ☐ I don't contribute to group discussions unless I'm asked a direct question. ☐ I don't feel that a lot of discussion is necessary to complete a group project.	☐ I almost never lead the group discussion. ☐ I sometimes ask questions for clarification during group discussions. ☐ I'm usually quiet in group discussions, but will speak up if I feel it's very important. ☐ I'm willing to let others talk if it will get the project completed faster.	☐ Sometimes I'll ask questions or restate the views of other team members to clarify their ideas. ☐ I often find myself leading group discussions. ☐ I sometimes dominate the group discussion with my views and opinions. ☐ I'm more interested in getting the work done than ensuring all group members are participating equally.	☐ I take turns in conversations with group members and listen to others without interrupting. ☐ I constructively build upon or combine the contributions of others. ☐ I notice when someone is not participating and invite them to engage in the conversation. ☐ I feel that it's important for group discussions to involve all group members.
Time and Task Management	☐ I generally let my group members establish any timelines for completing work. ☐ I complete the work that is assigned to me by the group, but don't really go beyond that. ☐ I sometimes don't complete my work by established deadlines.	☐ I am involved with establishing timelines for completing work, but generally let others take the lead. ☐ I may volunteer to complete certain tasks, if no one else is willing to do them. ☐ I generally complete all my work by established deadlines.	☐ I take the lead in determining timelines for completing work by the group, and am willing to assign tasks to other group members. ☐ I will volunteer for tasks that I see as being more difficult. ☐ I complete all of my assigned work on time.	☐ I work with my group members to determine timelines and to identify the best person to complete each task. ☐ I will volunteer for the tasks that I feel I am best suited to complete. ☐ I complete most or all of my tasks ahead of schedule.
Interactions with Group Members	☐ I'm sometimes impolite or short with my group members. ☐ I may use negative tones when I write or speak to my group members about our project. ☐ I sometimes display negative facial expressions and body language when I interact with my group members. ☐ I sometimes speak negatively about the project or task my group is trying to complete. ☐ I avoid helping my group members accomplish tasks.	☐ I try not to be rude or impolite with my fellow group members ☐ I sometimes use both positive and negative tones when I write or speak to my group members about our project. ☐ I use both positive and negative facial expressions and body language when I interact with my group members ☐ I sometimes speak both positively and negatively about the project or task my group is trying to complete. ☐ I provide help to my group members, if asked, but don't go out of my way to do so.	☐ I'm generally kind and polite with my fellow group members. ☐ I generally use positive tones when I write or speak to my group members about our project. ☐ I generally display positive facial expressions and body language when I interact with my group members. ☐ I generally speak positively about the project or task my group is trying to complete. ☐ I don't mind helping my fellow group members if they need it.	☐ I'm almost always kind and polite with my fellow group members. ☐ I almost always use positive tones when I write or speak to my group members about our project. ☐ I almost always display positive facial expressions and body language when I interact with my group members. ☐ I almost always speak positively about the project or task my group is trying to complete. ☐ I will go out of my way to assist my fellow group members if they need help.
Responses to Inter-group Conflict or Disagreement	☐ I feel that conflict in a group is never good and should be avoided if possible. ☐ I generally do not voice my opinion when group conflict occurs. ☐ When conflict occurs I let people work out their own disagreements.	☐ I feel that there is generally a right-side and a wrong-side in group conflicts. ☐ When conflict occurs I think it's best to focus on common ground and to minimize the conflict. ☐ I allow others to take the lead in resolving conflict.	☐ When conflict occurs I can recognize and appreciate the value of different perspectives. ☐ I take the lead in combining the ideas of group members to resolve the conflict. ☐ I try to resolve the conflict as quickly and efficiently as possible so it does not distract us from our project.	☐ I recognize conflict can be both destructive and constructive. ☐ I work with my group members to resolve the conflict in a way that strengthens the group and the project. ☐ I work with my group members to resolve the conflict, even if it takes more time and work.

Methodology and Implementation

- Sampling Schema: "Sample of Convenience"

- Email to Associate Deans in charge of Assessment within each of the colleges

- Instructors in 3 of our 7 colleges volunteered

- All student classifications

- Logistics of scheduling classroom administration (main campus, off-site)

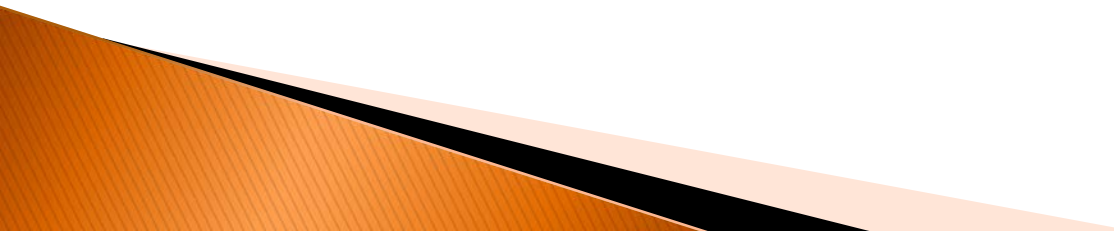# Methodology and Implementation

▸ 7 departments within 3 colleges

▸ Total of 580 completed TSRI's

▸ Administered by:
  ◦ Assessment Coordinator – 13 classes on main campus
  ◦ Professor – 4 classes on main campus
  ◦ Professor – 5 classes off-site

▸ Took place September–November 2016

▸ Only 10–15 minutes to administer in class

Instrument – Domains

▸ Contributions to Group Activities

▸ Contributions to Group Discussions

▸ Time and Task Management

▸ Interactions with Group Members

▸ Responses to Inter-group Conflict or Disagreement

Instrument – Demographics

▸ Ethnicity

▸ Race (choose all that apply)

▸ Gender

▸ Classification

▸ Did You Transfer to SHSU?

▸ Number of Years at SHSU?

▸ Number of Teamwork Experiences at SHSU?

Scoring System

▸ Qualitative → Quantitative

▸ How the scoring system was determined (handout)

▸ Scoring possibilities:
  ◦ 0 1 2 3
  ◦ 1 2 3 4
  ◦ –1 1 2 3
  ◦ –1 0 1 2

▸ Selected 3rd scoring method above

▸ TSRI's hand scored by a student worker

Correct TSRI Example

Name: [redacted]   SAM ID [redacted]   (4½)

TEAMWORK SELF-EVALUATION

Instructions: Reflect back on your past group experiences during your time at Sam Houston State University. Please use the check boxes below to mark all elements that experiences when interacting in a team environment. There are no wrong answers, so please be as honest as you can in your self-reflection.

Category				
Contributions to Group Activities	☐I only contribute what is required to complete the project or task. ☐I almost always allow others to come up with ideas for completing the project.	☐I may contribute some ideas and work to the group. ☐I generally allow others to take the lead in completing the group project.	☐I actively contribute ideas and work that advance the project. ☑I make sure that my ideas are considered or used to complete the project.	☑I help integr members to ☐It's less imp whether tho
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Incorrect TSRI Example

Name [redacted]   SAM ID [redacted]   (10)
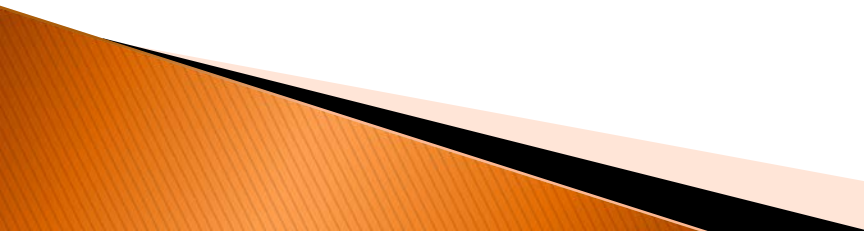
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Contributions to Group Activities (2)	☐I only contribute what is required to complete the project or task. ☐I almost always allow others to come up with ideas for completing the project.	☐I may contribute some ideas and work to the group. ☐I generally allow others to take the lead in completing the group project.	☑I actively contribute ideas and work that advance the project. ☐I make sure that my ideas are considered or used to complete the project.	☐I help integrate members to co ☐It's less import whether those
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Time and Task Management (1)	☐I generally let my group members establish any timelines for completing work. ☐I complete the work that is assigned to me by the group, but don't really go beyond that. ☐I sometimes don't complete my work by established deadlines.	☐I am involved with establishing timelines for completing work, but generally let others take the lead. ☐I may volunteer to complete certain tasks, if no one else is willing to do them. ☑I generally complete all my work by established deadlines.	☐I take the lead in determining timelines for completing work by the group, and am willing to assign tasks to other group members. ☐I will volunteer for tasks that I see as being more difficult. ☐I complete all of my assigned work on time.	☐I work with my timelines and t each task. ☐I will volunteer suited to comp ☐I complete mo schedule.
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Observations

- Student perception of how to complete TSRI
  ◦ Delivery of instructions – OAPA staff vs. instructor

  ◦ Refined explanation of instructions throughout the semester to emphasize how to do it "right"

- Numbers
  ◦ Total completed = 580

  ◦ Total usable = 485 (84%)

Adjustments to be Made

- Instrument Weaknesses
  - Reformat the TSRI to make it more user-friendly

- Script/Instructions
  - Clarify how the instrument should be filled out

- Result of changes should be a greater percentage of valid, usable TSRI's

Proof of Concept

- All scores, demographics, and student ID's were entered into Excel for analysis

- Data collected through the Pilot administration are probably not that meaningful.
  ◦ Sampling was not systematic

  ◦ Administration technique changed over time

- However, administration proved that the instrument could work, could be scored, and could produce usable data.

Potentials for Data Analysis

▸ Instrument may be used to provide snapshot views of student Teamwork abilities within specific colleges/departments.

▸ OAPA can also use the collected Student ID's to gather additional demographic and student performance variables from the Institutional Research Office.
  ◦ e.g., gender, ethnicity, major, GPA, SAT/ACT scores

▸ These variables can be used to conduct robust secondary data analysis.
  ◦ Disaggregating student performance by demographic variables

  ◦ Correlating student performance with additional performance metrics

What's Next?

- Spring 2017
  - Review data

  - Refine instrument and script

  - Tweak questions and methodology

- Summer 2017
  - Possible 2nd Pilot in some courses

What's Next?

- Fall 2017
  - Implement strategically

  - Systematic coverage (college rotation)

  - Test validity

- Future – Online Version?
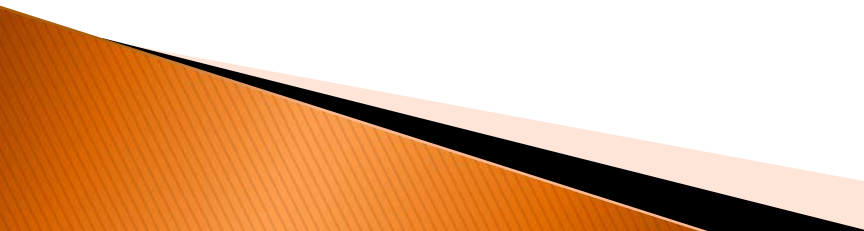
Hypotheses

Our expectations with a valid instrument:

Juniors and Seniors should generally have a higher total score than Freshmen and Sophomores

HOWEVER

Students with more teamwork experiences, regardless of class standing, should have a higher score than those with fewer experiences.

Questions?

Contact Us

- Brandi Jones, bjones@shsu.edu, 936-294-1353

- Tama Hamrick, thamrick@shsu.edu, 936-294-3279

- Jeff Roberts, jeff.Roberts@shsu.edu, 936-294-1859

Citations

Hart Research Associates. (2016). *Trends in learning outcomes assessment: Key findings from a survey among administrators at AAC&U member institutions.* Retrieved from https://www.aacu.org/sites/default/files/files/LEAP/2015_Survey_Report3.pdf