STEAM Academy's
Student Club Tracking System

STEAM Academy's student societies have exploded in numbers and attendance. This is a wonderful thing, but has increased the competition for funding, resources, and recognition. Each society is now required to track their contributions for an annual report to their department supervisors and the school president. In addition to activities and enrollment, societies are now required to include attendance and coordinating club events, school events, and fundraising activities. Individual students will also be required to be members of national professional societies and participate in professional development. This way the club and its members will be well rounded. This system will allow them to keep track of their activities and produce a professional report.
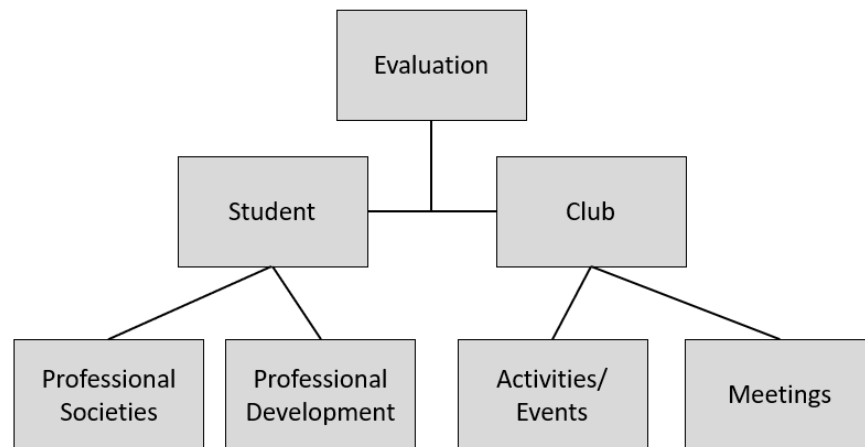

Figure 1: Evaluations are combined student and club activities

Societies are required to attend/plan at least 5 events/activities a year. (This is events, not days.) Societies also have to have at least 90% attendance at all meeting, barring major crisis. Underperforming societies will be put on probation and expected to pick up their numbers by the end of the year or be removed from the funding/resource lists.

Student members are required to attend 75% of events and be one of the coordinators for at least one event, and must attend at least 50% of the days of an event. They are also required to have at least 3 professional development opportunities completed; one has to be training. Only 1 other professional society membership is required, but more is encouraged. Underperforming students will be put on probation and expected to pick up their numbers by the end of the year or be removed from the society.

Evaluations and Activities

Activities are associated with only one evaluation per semester/year. There is more than one activity for student club members to log. There are 4 main activities:

- Club meetings – individual clubs
- Service activities/events – individual clubs
- Professional development – individual students
- Membership in professional societies – individual students

There is an additional section for other related activities not listed in the 4 above. Students can list other activities that are not mentioned in their respective tables if they think they will contribute favorably to the report. Clubs will specify the type of activity and then describe the contributions.

Note that if a given activity/event is more than one day, you need 1 record per day added to the club activity attendance table. Example, Club A has a 4-day fundraising event from 8/17 – 8/20. Pablo participated for 3 days, Riku for 4 days, and Eliza for 1 day.

Name	Activity	Date	Description of Duties
Pablo	Fundraising	8/20/2021	Sales and Takedown help
Pablo	Fundraising	8/19/2021	Sales
Pablo	Fundraising	8/17/2021	Setup help
Riku	Fundraising	8/20/2021	Sales
Riku	Fundraising	8/19/2021	Sales
Riku	Fundraising	8/18/2021	Sales
Riku	Fundraising	8/17/2021	Sales and Setup help
Eliza	Fundraising	8/17/2021	Sales and Setup help

Table 1: Example activity attendance log. Note, <u>not the actual table entries</u>.

Tables Information

Note: Recall that all tables must have an integer unique identifier for rows, these are the ids mentioned. You need to add that at the top of the table yourself for all tables. Foreign keys can be anywhere in the table.

Bridge Table Information

Note: Note that bridge tables have 2+ foreign keys for composite keys. This means that the keys HAVE TO MATCH their originating tables. You will have to work with the creators of the other tables to make sure you evenly distribute your records in a logical manner. Like primary keys, composite keys have to be at the top of the table.

Student

- Student id – integer primary key.
- First name
- Middle name (optional)
- Last name
- Birth date
- Age – between 0 and 120 inclusive
- Gender – an id that will reference the gender lookup table.
- Email address – must end in @Academy.edu
- Phone number main – must have the following format: ddd-ddd-dddd (where d is a single digit)
- Phone number secondary (optional) – must have the following format: ddd-ddd-dddd (where d is a single digit)
- Mailing Address – id from the address table
- Major – id from the major table
- GPA – between 0.00 and 4.00, with 2 decimal places, inclusive
- Graduation date - optional
- Active Membership in Professional Societies? 0 = no, 1 = yes
- Training Completed? 0 = no, 1 = yes

Major

- Major id – integer primary key.
- Major Name – obtain a list of names from this site: https://www.mcneese.edu/academics/undergraduate-programs/

Student Club Activities – give 10 logical club activities (more than one club can attend each of these activities)

- Activity id – integer primary key
- Activity name – be unique, creative, and logical
- Location id
- Activity description – 250 characters

Prefix:

- Prefix Id – integer primary key.
- Prefix Name: Sr, Mr, Mrs, Ms, or Dr

Location Type:

- Location type Id – integer primary key.
- Location Type Name – Building, Hall, Court, Outside (non-sports), Outside (sports), Quad, Arena, Classroom, Theater, or Studio

State

- State id – integer primary key.
- State Abbreviation – a two-character abbreviation of a state name. Louisiana - LA
- State Name - Obtain a list from this site:
  https://en.wikipedia.org/wiki/List_of_states_and_territories_of_the_United_States

Student Clubs – will be only 10 records, do not add 50

- Club id – integer primary key.
- Name – unique club name, **look up clubs on campus and choose 10 science related clubs**.
- Club start date
- Faculty supervisor id
- Club description – 500 characters. (You can use the descriptions on their websites)

Student club membership

This is a bridge table that will use the student id and Club id as a combined key.

- Student Membership Id – integer primary key
- Student id
- Club id
- Membership start date
- Membership end date (optional)
- Membership active? 0 = no, 1 = yes
- Duty Description for this semester – 500 characters.

Student Club Activity Attendance

This is a bridge table that will use the Club evaluation id, Student id, and Activity id as a combined key. See information above about this table and its records

- Club evaluation id – part 1 of a composite key
- Student id – part 2 of a composite key
- Activity id – part 3 of a composite key
- Total hours attended
- Date attended
- Coordinator/Planner? 0 = no, 1 = yes
- Contribution description – 250 characters

Group Member 3 Responsibility:

Faculty – Obtain all faculty information from the McNeese Department of Engineering and Computer Science

- Faculty id – integer primary key.
- Prefix – an id from the prefix table
- First name
- Middle name (optional)
- Last name
- Email address – must end in @Academy.edu
- Department name – one of McNeese's departments.
- Office location id
- Office room number – must be between 100 and 499 inclusive
- Phone number – must have the following format: ddd-ddd-dddd (where d is a single digit)

Addresses

Note that more than one person can have the same address. Also, you will eventually need a total of 50 addresses: 20 addresses from Lake Charles, 20 from the USA in different states, and 10 from different countries in the country table. Each address consists of:

- Address Id – integer primary key.
- Country – an id from the country table
- State – an id from the state lookup table. (Optional if country other than USA or USA territory.)
- City – use a logical city name
- Street – use a logical street name
- Street number
- Apartment or Dorm number (optional)

Professional development

- Professional Development id – integer
- Student id
- Professional development type – will need a separate lookup table (values = Conference, Committee, Research, Internship, and Other)
- School Mandated? 0 = no, 1 = yes
- Description – 500 characters.

Student meeting attendance

- Student id – part 1 of a composite key
- Club id – part 2 of a composite key
- Date

Professional Societies – will only be the societies listed in the sites below, do not add 50

The societies need to come from the following websites. You will need to do research to complete the following table. (note, do not keep duplicates.)
https://www.bestcollegereviews.org/lists/five-computer-science-associations-to-join/
https://www.bestmastersdegrees.com/lists/5-great-professional-organizations-for-engineers

- Society id – integer primary key
- Name – see above site
- Address id – see above site
- Contact email – see above site
- Contact phone – see above site
- Founding date – see above site
- Brief description – 500 characters – see above site

Gender

The academy is an inclusive school and has the following list of possible genders.
- Gender id – integer primary key.
- Gender name – one of the following options: Female, Male, Transgender Female, Transgender Male, Gender Variant/Non-Conforming, Non-Binary, Other, Prefer Not to Answer

Locations:

- Location Id – integer primary key.
- Location name – The locations and facilities at McNeese. (Not just the buildings). The last location should be "Virtual" for when a building is not used.
- Location address id – use address table, null if virtual
- Location main contact – use faculty table, should be a unique coordinator
- Location type – id from location type table.
- Location capacity – max number of people the site can contain distribute evenly between 100 and 10000 inclusive. Null if virtual.
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Professional Society Membership

This is a bridge table that will use the Student id and Society id as a combined key.

- Student id – part 1 of a composite key
- Society id – part 2 of a composite key
- Start membership date
- End membership date - optional

Country – you only need 50 countries including USA. Do not add more. Alphabetical order.

- Country id – integer primary key.
- Country Abbreviation – an abbreviation of the country name. ie USA
- Country Name - Obtain a list from this site:
  https://www.worldometers.info/geography/alphabetical-list-of-countries/

Club Evaluation

This is a bridge table that will use the Activity id and Club id as a combined key. You will also include the officers of the club here since they may change over a semester/year due to changes and graduation rates.

- Club id – part 1 of a composite key
- Activity id – part 2 of a composite key
- Semester
- Year
- President – use a student id
- Vice-President – use a student id
- Secretary – use a student id
- Treasurer – use a student id
- In good standing? 0 = no, 1 = yes

Training

All officers of clubs are required to take training. Students will have to take at least 3 of the following trainings every semester. Half are offered in the Spring and half in the Fall.

- Training id – integer primary key
- Training name – use the following: Hazing Prevention, Defensive Driving, Title 9, Drug and Alcohol, Power Based Harassment, and Preventing Sexual Harassment/Discrimination.
- Faculty Assigner – use a faculty id
- Semester Offered

Training Log

This table is a bridge table between students and the training tables.

- Student id – part 1 of a composite key
- Training id – part 2 of a composite key
- Training start date
- Training end date