

# Developing STEAM Educator's Proficiency Scoring Framework

Focus on:

How a Philippine higher education STEAM teacher  
would have an idea of his/her proficiency level?

One's proficiency level/profile depends entirely on the Survey without outside assumptions

- 60 items
- Questionnaire with no correct answer (elicits response on what is nearly true to oneself)
- Each item must have a unique response
- Covering 7 PPST domains including 7 TPACK dimensions
- 1507 STEAM teacher respondents

## A sample item in the PPST's Content Knowledge and Pedagogy (Domain 1)

- Possesses content knowledge on STEAM.

Always true to oneself

Often ...

Occasionally ...

Rarely ...

Not seen

## A sample outcome (ones proficiency profile) appropriate for PPST's Domain 1

✓ Always true to oneself: 5/19 or 26%

✓ Often ... : 6/19 or 32%

✓ Occasionally ... : 4/19 or 21%

✓ Rarely ... : 3/19 or 16%

✓ Not seen : 1/19 or 5%

To gain any meaning and determine ones proficiency level, ones profile **must be compared** to the national STEAM proficiency profile. How is the national STEAM proficiency profile determined?

National STEAM proficiency profile in the PPST's Domain 1

- ✓ Distinguished : 37%
- ✓ Highly Proficient : 44%
- ✓ Proficient : 14%
- ✓ Beginner : 3%
- ✓ Not Observed : 2%

Comparison (taking the difference): ones rating minus (-) national rating

**Distinguished** : -11% (national rating is greater than ones rating)

**Highly Proficient** : -12%

**Proficient** : 7%

**Beginner** : 13%

**Not Observed** : 3%

### Favorable Characteristic of the Scoring Framework:

- Adoptable provided the survey have no wrong and correct responses
- Results are valid provided one and only one response is allowed
- Internally rigorous without need for external assumptions

Thank you very much!