# Capacity Maturity and Recommendation

International Civic and Citizenship Education Study, 2016 (ICPSR 37147)

Simon Chen, Yunwei Zhang, Wenjie Tang, Zecheng Chang

#### Introduction

The International Civic and Citizenship Education Study(2016) is an international assessment aimed to measure to what extent young people from all across the world are prepared to accept their roles and responsibilities when they step into the society. It included many different perspectives, such as the level of student knowledge by the young people and their understanding of their roles in the society. It measured the outcomes of several different countries and evaluated with the family background and the individual characteristics of the students.

## **Goal & Assumptions**

- Investigating student knowledge and understanding of
  - Civics
  - Citizenship
  - Perceptions
  - Attitudes
  - Activities related to civics and citizenship
- Examine differences among countries in the outcomes and relationship of
  - Outcomes to students' individual characteristics
  - Family backgrounds
  - Teaching practices
  - School and broader community contexts

#### **Data Produced**

Data collection: National research centers of the participating countries.

Variables: Datasets 1-24 correspond with the school questionnaire.

Datasets 25-48 International Student Achievement Questionnaire

Datasets 49-63 European Module Student Questionnaire

Datasets 64-87 with the international Student Questionnaire

. . .

Data Storage/access: Public-use data files are available for public.

Data Retention: 5 copies for 12 months.

## **Potential Challenges**

- Legal and ethical concerns of collecting eighth grade students' data from 24 countries
- Sampling, data collection challenges (large sample, language/cultural difference, cost)
- Curation and storage challenges
- Privacy, and security concerns
- Data sharing and reusability

### Recommandation

- Grounded research by local laws and culture
- Prior communication with schools regarding the whole research process
- Saves data backups
- Provide preference for citation and sharing restriction

# Project analysis per capability maturity model.

- 1. Data Management in General
- 2. Data acquisition, processing and quality assurance
- 3. Data Description and Representation
- 4. Data Dissemination
- 5. Repository Services and Preservation

## 1. Data Management in General

**Overall Goal:** 

Collecting and maintain high quality data to support this research.

**Evaluation:** 

Good, but lack of information about the cost

# 2. Data acquisition, processing and quality assurance

**Overall Goal:** 

Reliably capture research data in a way that facilitates use, preservation and reuse.

**Evaluation:** 

# 3. Data Description and Representation

**Overall Goal:** 

Describe and represent data to facilitate future discovery and use.

**Evaluation:** 

## 4. Data Dissemination

#### **Overall Goal:**

Establish the policy and technical infrastructures for users to share, discover, obtain, and interact with data.

#### **Evaluation:**

# 5. Repository Services and Preservation

#### **Overall Goal:**

Keep research data accessible, even as hardware, software, and storage media change

#### **Evaluation:**

### Conclusion

In conclusion, the International Civic and Citizenship Education Study(2016) did an excellent job overall. Not only did it contain a very detailed assessment plan, but it also ended up with reliable and consistent data which helped data scientists to analyze the students of the different countries as a whole.

### Reference

International Civic and Citizenship Education Study, 2016 (ICPSR 37147)

Website:https://www.icpsr.umich.edu/web/ICPSR/studies/37147#