St. Joseph's College of Quezon City
College of Arts and Sciences

An Assessment of Technology Self-Efficacy of Incoming CAS Students of SJCQC

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Abstract

This study aimed to assess the technological literacy of the incoming students in the College of Arts and Science of St. Joseph's College of QC using the International Society for Technology in Education (ISTE) National Educational Technology Standards for Students (NETS-S) standard. The study's respondents are 44 new students of the College of Arts and Sciences during the first semester of the school year 2021-2022. Results showed that *Computational Thinker* garnered the lowest mean score of 2.79, indicating medium level self-efficacy. This means that students are not always comfortable using technology to collect, evaluate, and present data for problem-solving and decision-making. Based on the students' weaknesses in each ISTE standard, 26 will undergo remediation and each student may need to remediate multiple standards. Computational Thinker has the most students (20), followed by Technical Proficiency (10), Creative Communicator (9), Global Collaborator (5), Knowledge Constructor (3), and Digital Citizen (1 student). The action plan was based on the assessment result which was used to generate computer-training outcomes with verifiable indicators on how to bridge the skills students lack to perform better as they enter the college level.

Keywords: Action Research, Technological Literacy, Self-Efficacy

Introduction

Emerging technologies have facilitated knowledge development, globalization, and dissemination of new practices. Lifelong learning, innovation, and growth have become increasingly important as the information society has evolved. In this aspect, assessing students' technology literacy helps them keep up with technological changes.

According to Bayrak and Yurdugül (2013), Computer literacy is one of the most important 21st-century skills. Suppose students are not technologically equipped and prepared with the requisite abilities. In that case, there may be conflicts with teachers' instructions since they must still attend to teaching the skills, causing a delay in achieving the lesson's objectives on time.

Several standards have been proposed to address learners' IT literacy. The International Society for Technology in Education has presented one of the most prominent educational technology standards (ISTE) frameworks. These standards, known as the National Educational Technology Standards for Students (NETS-S), aim to assess the skills and knowledge of students who are expected to learn and live productively in a digital world.

Abidin and Yavuz (2013) have used this standard to develop a scale to investigate 8th grades competencies regarding the educational technology standards. Ayad & Ajrami(2017) examine the degree of implementation of ISTE standards for teachers and students in technical education colleges in Gaza Strip, Palestine. As a result of the low level of implementation of ISTE standards, it is advised that ISTE standards be used through seminars and training courses.

The study uses the ISTE NET-S standards to define students' technology literacy: Technical Proficiency which assesses students' understanding of technology operations' fundamental concepts; Creative Communicator evaluate how students communicate properly and creatively for multiple objectives using platforms, tools, styles, formats, and digital media; Computational Thinker assess how students use technology to obtain data, evaluate it, and present it in diverse ways for problem-solving and decision-making.; Knowledge Constructor assess how students curate information from digital resources using a variety of tools and strategies to generate collections of artifacts that exhibit relevant connections or conclusions; Global Collaborator evaluates how students use digital tools to collaborate with others and work effectively in teams locally and worldwide; and Digital citizen is a test of students' understanding of their digital rights, responsibilities, and opportunities. The factors needed for digital citizens were identified using Ribble and Bailey's (2007).

The assessment result is used to generate an objective measure such as computer-training outcomes on how to bridge the skills that they lack to perform better as they enter the college level.

Statement of the Problem

1. What is the self-efficacy level of the incoming CAS students regarding their technology literacy according to the 2016 ISTE Standards for Students?
   - 1.1 Technical Proficiency
   - 1.2 Creative Communicator
   - 1.3 Computational Thinker
   - 1.4 Knowledge Constructor
   - 1.5 Global Collaborator
   - 1.6 Digital citizen

1.7 Rights and responsibilities
2. What are the weaknesses of students in terms of ISTE Standards?
3. What are the proposed solutions that will address the weaknesses of students in terms of ISTE Standards?

Literature Review

Assessment Tools

To evaluate the Technological Literacy among the grade 8 Turkish learners, Abidin and Yavuz (2013) generated an objective measure using several frameworks like NCLB, ISTE NETS-S, and MNE goals. No Child Left Behind (NCLB) program initiated by the US government in 2001 aimed to improve student achievement through the use of technology in elementary schools and narrow the achievement gap between the highest and the lowest-performing students.

Similarly, the Turkish Ministry of Education has made considerable investments to improve the quality of education through enriching learning environments with ICTs Gulbahar and Ismail (2008). The Ministry of National Education in Turkey has launched the "Movement of Enhancing Opportunities and Improving Technology" project, abbreviated as FATIH. The project's goal is to increase computer literacy in schools by giving students access to emerging ICT tools and resources. The project also involves teacher training on how to use technology in the classroom appropriately. Moreover, the current study mainly addressed ISTE NETS-S areas of technical proficiency, creativity, digital citizenship and participation, and innovativeness.

The National Education Association (NEA) provides ways to assess digital literacy for students and educators. Murray (2020) stated that it is essential to figure out your goals before you can choose an assessment tool. Guidelines are provided to help understand the goals, such as the necessity of computational thinking, which focuses on testing knowledge and determining the capacity to solve technical problems, think critically, and code. Scope and sequencing are required to offer an assessment that identifies shortfalls and then provides a road map for getting from here to there or a one-and-done report. A requirement for the capacity to integrate with a learning management system (LMS), which many technologies provide but the most basic reports are unlikely to. After identifying your goals, four assessment tools are suggested that vary in depth, time demands, cost, and impact on life.

These studies have reaffirmed the necessity of technological literacy as a necessary tool in schools and other institutions. Furthermore, the standard for assessing technical literacy was investigated and how it was applied in various institutions. Moreover, the researcher created methods for assessing technological literacy based on specific measures.

Technology Literacy Standards

Reinoehl and Hanna (1990) define computer literacy as the ability to use a computer in conjunction with a skill in a professional or educational field. A person is considered computer literate if they understand computers, understand how they work, and use and employ Rochester and Rochester(1991).

In another way, Akkoyunlu and Orhan (2003) says that a computer literate person can use a computer to retrieve information, interact with others, and solve problems by using the computer and apps to achieve specific objectives.

On the other hand, information literacy is defined as a set of skills that need individuals to recognize whenever they need information and to be able to locate, evaluate, and effectively use that information according to Gullikson (2006). Basic computers, advanced computers, the Internet, research, and presentations can all be measured as part of a combined evaluation of information literacy and computer abilities according to Heinrichs & Lim (2009). Also, according to Heil (2005) the ability to critically examine internet sources and determine whether each reference is neutral, truthful, and produced by competent persons with a specific understanding of the issue is a crucial aspect of information literacy.

The ISTE were first published in 1998 as the National Educational Technology Standards (NETS) which focused on students' technical skills. It was originally founded by David Moursund and a group of K-12 and University of Oregon educators. It was successively revised and released as ISTE Standards for Students in 2017.

This study also employed the ISTE NET-S standards to define students' technology literacy, which are operationally defined in this study.

Technical Proficiency examines students' abilities to select, use, and troubleshoot current technologies, as well as transfer knowledge to explore emerging technologies. With this study, the researcher correlates the Technical Proficiency standard as students' capacity to comprehend core ideas of technology operations, display the ability to select, operate, and troubleshoot current technologies, and transfer their knowledge to investigate emerging technologies.

Creative Communicators assess how students use platforms, techniques, styles, formats, and digital media to communicate clearly and creatively for varied objectives. Operationally, this pertains to this study’s respondents’ use of Microsoft Office productivity tools which they need when working on research projects (i.e., including operating various research-related apps, presentation, and desktop publishing).

Computational Thinker assesses how students collect or identify relevant data sets, employing digital tools to evaluate them, and representing data in various ways to

help problem-solving and decision-making. For this research, this was assessed based on how comfortable students are with using spreadsheets to organize and analyze data.

Knowledge Constructor assesses how students curate information from digital resources using a variety of tools and strategies to generate collections of artifacts that exhibit relevant connections or conclusions. Auberry (2018) demonstrated that digital people could quickly get information. As a result, students require guidance in determining what to do with the materials they get. Investigating an author's competence, tracking a source's credibility through time, and verifying facts from multiple sources all benefit from learning with focused practice. This study found that education and hands-on experience were the best ways to learn how to create ethical material. In other words, students required sufficient supervision and direction to join the digital and information literacy community. For this study, this was measured by asking the students how they assess their skills in searching and evaluating web information. It also covers their understanding of how to use various web programs, such as Learning Management Systems.

Global Collaborator measures how students use digital tools to collaborate with others and work effectively in teams locally and worldwide. In this study, this was assessed by determining how students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally using essential online tools.

Digital citizen assesses student understanding of rights, duties, and possibilities in a digitally connected world. They exemplify safe, legal, and ethical behavior. In this study, this standard pertains to the students' assessment on their understanding of the rights, responsibilities, and possibilities of living, learning, and working in an interconnected digital environment and how they act and model in safe, legal, and ethical ways.

In response to related and previous studies, this action research focuses on assessing the technological literacy of the incoming college students at St. Joseph's College in Quezon City, guided to be critical-evaluative of technology literacy skills. The assessment's findings will lead to a necessary action plan incorporating the many skills indicated in the various studies and standards.

Conceptual Framework

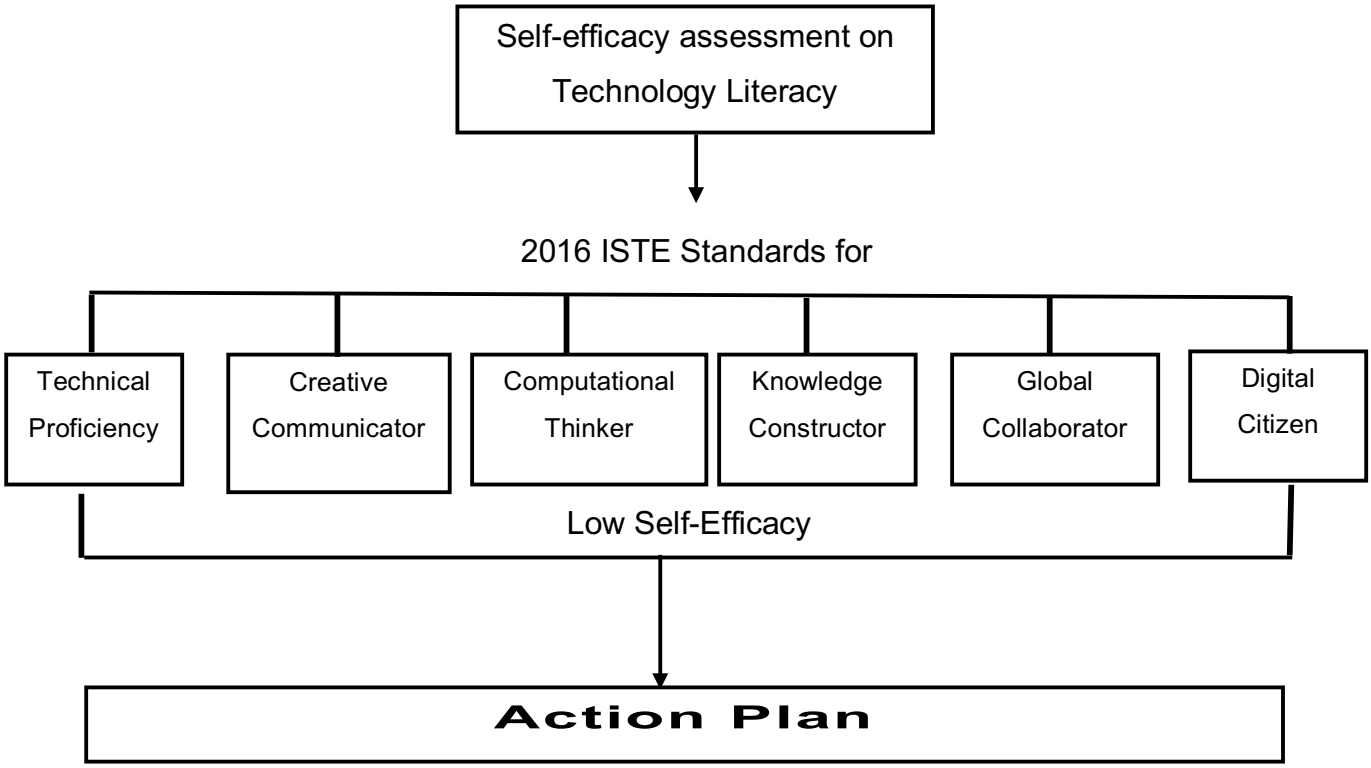


Figure 1: Conceptual Framework

The research process is depicted in Figure 1. The self-efficacy assessment in terms of technological literacy were the key variables used. The composition of their assessment was based on the 2016 ISTE standards for students. It emphasizes the essential skills or abilities they should possess, such as Technical Proficiency, Creative Communicator, Computational Thinker, Knowledge Constructor, Global Collaborator, and Digital Citizen. The assessment's conclusion is focused on low self-efficacy that needs to be address.

Significance of the Study

This study will contribute research-based data and knowledge on the Assessment of Technology Literacy of incoming CAS students of SJCQC. The researcher believes that using certain standards are essential for guiding learning design, inspiring professional progress, and advocating for dynamic learning in the classroom. Hence, the faculty may use the research results to guide their learning design, inspire professional

growth and advocate for dynamic learning in the school. Also, school leaders may use the standards mentioned in this study as a guide for furthering digital learning and to support a more organized system wide planning.

On the other hand, students will be guided on how to improve their technical abilities and meet the required standard as they continue through college.

Methodology

This study aims to use an action research approach to investigate actual problems to develop a solution Creswell (2015). According to Stringer (2008), the action research cycle has five key steps: designing the study, collecting data, analyzing data, communicating outcomes, and taking action. The researcher designed the study by identifying the needed technology skills of students according to the ISTE standards. Then, the researcher collects information from a variety of sources about specific skills for each standard.

Next, the information acquired from the research questionnaire is then reviewed to discover essential elements of the topic under inquiry, which are the areas of technology skills that need to be developed.

During the communication stage, the assessment of students' technology skills is made known to relevant audiences, such as the students who participated in the study and the CAS teachers through appropriate media. Finally, and most importantly for the action research cycle, the researcher acts based on the study's findings. These findings are used to help find a solution to the problem that was researched. To come up with solutions, the constructivist theory is employed as a guide.

Students who earn below Medium Self-Efficacy will be notified via email of their results and the required action plan.

The demographics of the respondents were presented using frequency and percentage distributions. Students' self-efficacy level on their assessment of their technological skills was analyzed using weighted mean and frequency.

Sampling

The researcher selected the respondents using the purposive sampling technique. A purposive sample is a non-probability sample determined based on the characteristic/s of a population and the objective/s of the study. Purposive sampling for Crossman (2017) is also known as judgmental, selective, or subjective sampling.

The study's respondents are 44 new students of the College of Arts and Sciences during the first semester of the school year 2021-2022. They were selected since they

were the new students during the study period. They were emailed to complete the Google form survey.

Research Instrument

The researcher obtained authorization from the Dean's office at St. Joseph College Quezon City's CAS department to conduct the survey and obtain a list of incoming students for the first semester of the school year 2021-2022 in line with data protection standards. Google forms were used to distribute the survey. To protect the privacy and secrecy of the participants' identities, the survey form stated that writing names is optional and only pertinent information was requested.

The first part is the demography, which includes information on students' courses, secondary school, and technological equipment.

The next part is to assess students' self-efficacy based from the ISTE-NETS. Osler's (2006) Technology Competency and Skills Assessment and Ribble and Bailey's (2007) Factors Needed for Digital Citizens were used as a guide to set specific skills and items are constructed based on the description of each standard with five-point Likert scale response level.

There are 43 items to quantify the student’s self-efficacy. Technical Proficiency has 5 items; Creative Communicator has 11 items that focus on the three basic productivity tools: Word Processing, Presentation, and Desktop Publishing; Computational Thinker has 3 items that focus on spreadsheet use; Knowledge Constructor has 8 items that focus on internet self-efficacy; Global Collaborator has 3 items; and Digital Citizen skill has 13 items that focus on Communication, Literacy, Etiquettes, Security, and Rights and Responsibilities.

The responses to the questions were evaluated and analyzed after the survey. Table 1 shows how the frequency levels are interpreted into its self-efficacy level.

Table 1

Self-Efficacy Likert scale

Interval Range	Level	Self-Efficacy
4.20-5.00	Always	Very High Self-Efficacy
3.40-4.19	Often	High Self-Efficacy
2.60-3.39	Sometimes	Medium Self-Efficacy
1.80-2.59	Rarely	Low Self-Efficacy
1.00-1.79	Never	Very Low Self-Efficacy

RESULTS AND DISCUSSION

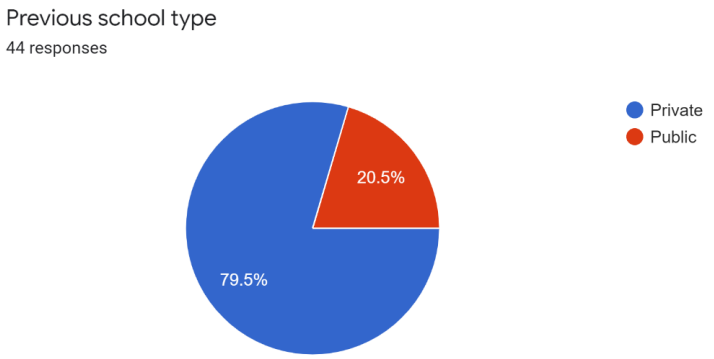
These are the findings from a survey of 44 respondents who are new students to the College of Arts and Sciences at St. Joseph's College in QC for the school year 2021-2022 first semester.

A. Demographic of the incoming CAS students

The demographic provides information about students' secondary school, courses and technical equipment.

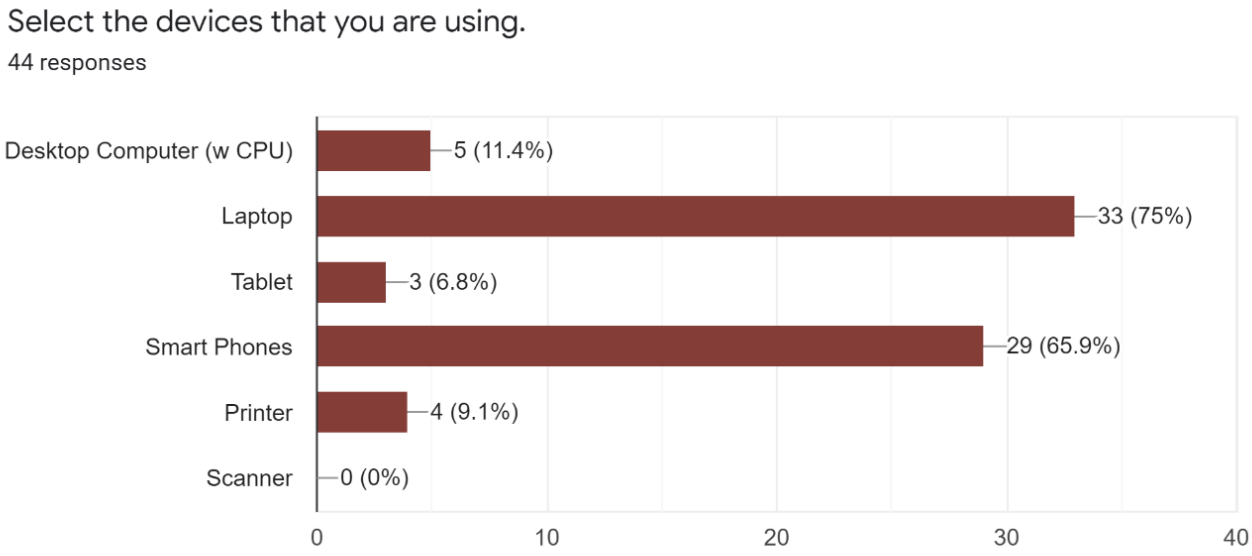
1. Secondary School Type

Figure shows that the majority of them attended secondary school in private schools, which accounted for 79.5 percent of the population, while 20.5 percent attended public institutions.



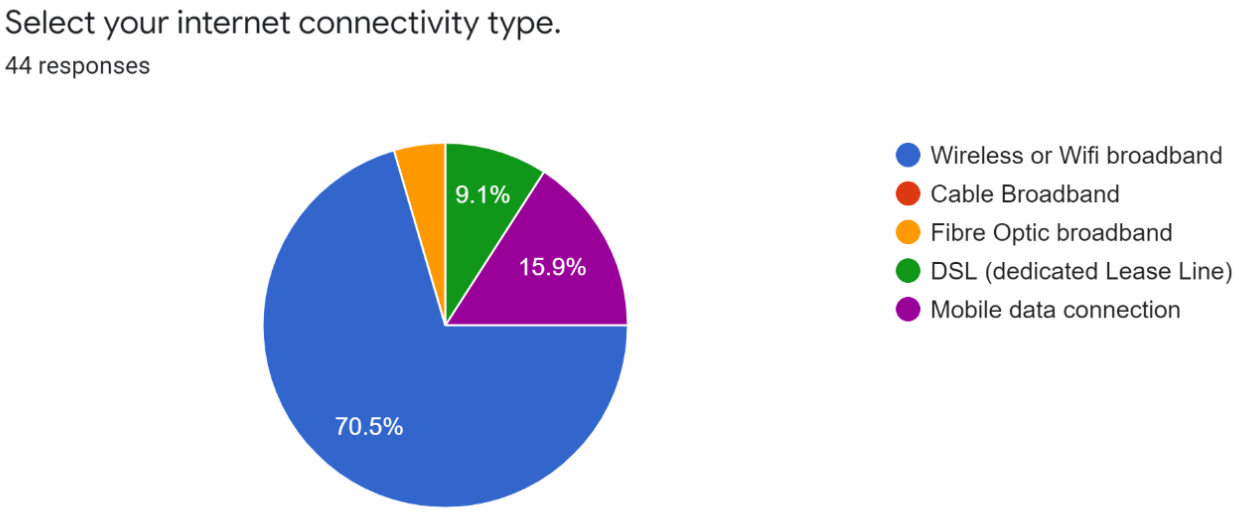
2. Devices Used

When it comes to the devices that students use, figure 2 shows that 75% of students use laptops, followed by 65.9 percent who use smartphones and 11.4 percent who use desktop computers. Moreover, 6.8% uses tablet and 9.1% are familiar with the use of printer. No participants are using the scanner.



3. Internet Connectivity

In terms of student internet access, 70.5 percent utilize wireless or WIFI broadband, 15.9 percent use mobile data connections, 9.1 percent use DSL lines, and 4.5 percent use fiber optic broadband.



B. Self-efficacy level of the incoming CAS students

Table 2 demonstrates the incoming CAS students' total self-efficacy in technological literacy. The lowest level, *Computational Thinker*, has a mean of 2.79, indicating that students sometimes use technology to collect, assess, and present data for problem-solving and decision-making, indicating medium self-efficacy. The rest of the standard reveals that students often perform the necessary technological skills required in college, indicating high self-efficacy. The data demonstrates that the self-efficacy of the incoming CAS students for the 1st semester of school year 2021-2022 is sufficient to perform the essential technological needs in their specific courses. However, teachers must improve computational thinking standards.

Table 2
Summary of Self-Efficacy interpretation

	Mean	Level	Self-Efficacy
Technical Proficiency	3.58	Often	High Self-Efficacy
Creative Communicator	3.44	Often	High Self-Efficacy
Computational Thinker	2.79	Sometimes	Medium Self-Efficacy
Knowledge Constructor	3.78	Often	High Self-Efficacy
Global Collaborator	3.73	Often	High Self-Efficacy
Digital Citizen	3.97	Often	High Self-Efficacy

C. Weaknesses of Students Based on ISTE Standards

According to Kolmar (2021), a candidate in almost any field should have basic computer skills or is interpreted as having medium self-efficacy. The student's weaknesses of each ISTE standard is identified as having a very low and low self-efficacy.

Table 3 indicates the frequency of students who did not meet the required self-efficacy level per standard. Students who scored very low or low require remediation. Very low self-efficacy means they have inadequate skills, and low efficacy means they have no knowledge of the skill. Computational Thinker has the most students (20), followed by Technical Proficiency (10), Creative Communicator (9), Global Collaborator (5), Knowledge Constructor (3), and Digital Citizen (1 student).

Table 3

Frequency of Students' ISTE Standard weaknesses.

	Self-Efficacy		
	Very low Self-Efficacy	Low Self-Efficacy	TOTAL
Technical Proficiency	2	8	10
Creative Communicator	4	5	9
Computational Thinker	11	9	20
Knowledge Constructor	1	2	3
Global Collaborator	1	4	5
Digital Citizen	0	1	1

Table 4 lists the 26 students and the self-efficacy level for each standard that they will undergo remediation. Every student may need to remediate multiple standards. The Computational Thinker standard has the highest number of students who are required to undergo training. According to Li, Schoenfeld, and diSessa, (2020) the concept of computational thinking is arguably complex since it encompasses not just technical capabilities but also analytical and mathematical abilities. Digital citizens received the fewest points, possibly because students are aware of the various rules that apply when using the internet.

Table 4

Students with low and very low self-efficacy

26 students	Technical Proficiency	Creative Communicator	Computational Thinker	Knowledge Constructor	Global Collaborator	Digital Citizen
Student 3			Very low			
Student 4	Very low	Very low	Very low			
Student 5			Very low			
Student 6			Very low	Low		
Student 7	Low	Low	Low		Low	
Student 10	Very low	Very low	Very low	Very low	Very low	Low
Student 12		Low				
Student 13	Low		Very low		Low	
Student 14			Low			
Student 16			Low			
Student 18	Low		Very low			
Student 24			Low			
Student 26			Low			
Student 28	Low		Low		Low	
Student 30		Very low	Very low			
Student 31		Very low	Very low			
Student 32		Low	Low			
Student 33	Low					
Student 35	Low					
Student 36	Low		Very low		Low	
Student 38	Low					
Student 39				Low		
Student 41		Low	Low			
Student 42		Low	Very low			
Student 43			Low			
Student 44			Low			
Total	10	9	20	3	5	1

Table 5 shows the frequency of course profiles of twenty-six (26) students who will undergo remediation and the number of students per standard. With seven (7) students in BS Psychology, two will undergo training on Technical proficiency and Creative communication, while all will be trained on Computation Thinker. Bachelor of Science in Information Technology or BS IT, with six students. Technical Proficiency, Creative Communicator, and Global Communicator training will be given to two students, while Computational Thinker will be given to five.

Bachelor of Science in Hotel and Restaurant Management or BS HRM, Bachelor of Science in Nursing or BS Nursing and Bachelor of Science in Social work all of which have three students. Bachelor of Science in Education and Bachelor of Science in Business Administration major in Marketing Management, both of which have two students. Similar to other courses, students will undergo training on the specific standard that they are needed to.

Table 5

Course Profile of Students Needing Remediation

Courses	No of students	Technical Proficiency	Creative Communicator	Computational Thinker	Knowledge Constructor	Global Collaborator	Digital Citizen
BS PSYCHOLOGY	7	2	2	7			
BS IT	6	2	2	5		2	
BSHRM	3	1	2	3	2	1	1
BS Education	2	1		2		1	
BS Nursing	3	1	1	1	1		
BS Social Work	3	1	2	3		1	
BSBA Marketing Management	2	2					
Total	26	10	9	21	3	5	1

Conclusions

The assessment of students' technology literacy as they attend college is essential to ensuring that their technological abilities align with the teachers' expected learning outcomes and to avoiding delays in attaining goals. In general, incoming CAS students entering the first semester of the school year 2021-2022 demonstrate a high level of self-efficacy, indicating that they possess the essential competencies to satisfy the technological demands of the college level. However, students with very low and low self-efficacy are the ones who need remediation. The *Computational Thinker* standard requires the most training, due to its highly complexity, as it covers not only technical competencies but also analytical and mathematical ability. Computer-training outcomes are needed in order to bridge the skills gap and prepare students for college.

Recommendations

Continuous training programs on individual courses should be offered in the future as a means of meeting the needs of each course. All courses should use math skills and technological resources in order to improve computational thinking standards. College professors should collaborate with high school instructors to develop a list of essential technology abilities. Lastly, conduct technological assessments of faculty to ensure that they are capable of providing students with the necessary technological skills.

Proposed Solutions to Address Students' Weaknesses Based on ISTE Standards

The action plan below was developed in response to the assessment results, which were used to generate computer-training outcomes with verifiable indicators on how to bridge the skills gaps that students face as they enter college. Each standard below addresses a specific skill which was derived from various of related studies. Sample templates for monitoring sheets for each standard are also included. The corresponding students who need the remediation are also indicated in the tables based on their respondent number.

A. Technical Proficiency or Empowered Learner

Objective: Perform the basic technical proficiencies
Time: 60 minutes
Person Responsible: IT personnel
Verifiable indicator: Attend the demonstration of the person responsible

Skills:
1. Connect devices to the computer
2. Connect the device to the internet
3. Print documents using the printer
4. Open different programs in different windows
5. Basic Troubleshooting such as:
    - Force close of an application
    - Reboot the device

Instruction: Check if the skills are evident after training

Technical Proficiency or Empowered Learner Monitoring Sheet

Student	**Connect devices to the computer**	**Connect the device to the internet**	**Print documents using the printer**	**Open different programs in different windows**	**Basic Troubleshooting such as:** • **Force close of an application** • **Reboot the device**
4					
7					
10					
13					
18					
28					
33					
35					
36					
38					

B. **Creative Communicator**

1. Word Processing Skills

Objective: Create a document that will serve as a framework for a research paper.
Verifiable Indicator: Pdf copy of the research template with citations

a. Basic text and page formatting
   - Font size
   - Spacing
   - Alignment

b. Modify headings
c. Generate page numbers and table of contents
d. Manage graphics and shapes

Person Responsible: IT Teacher

Verifiable Indicator: Pdf copy of the research template with citations

Time Frame: 120 minutes

e. Citations

Person Responsible: Research Teacher
Time Frame: 20 minutes

2. Presentation Skills

a. Hyperlink
b. Create Animation
c. Set timings
d. Create video report presentation

Objective: Create a presentation with links and create a video report presentation.

Person Responsible: IT Teacher

Time Frame: 120 Minutes

Verifiable Indicator: Presentation about the different tips when using PPT in presentation

3. Desktop Publishing

a. Brochure
b. Poster

Objective: Create different publication and edit graphics

Person Responsible: Arts Teacher

Time Frame: 120 Minutes

Verifiable Indicator: Brochure and Slogan output

Instruction: Check if the skills are evident after training

Creative Communicator Monitoring Sheet

Student	Word Processing Skills				Presentation Skills			Desktop Publishing	
	Basic text and page formatting using graphics & shapes	Modify headings	Generate Table of Contents	Citations	Create Hyperlink	Add Animations	Video Report presentation	Brochure	Poster
4									
7									
10									
12									
30									
31									
32									
41									
42									

C. Computational Thinker

Objective: Create worksheets applying basic formula, functions, and graphs
Time: 120 minutes
Person Responsible: IT Teacher
Verifiable indicator: Processed Survey Output

Skills: Using Spreadsheets …
1. to calculate or work on MDAS operation
2. to operate functions (average, sum, count, if)
3. to create graphs (lines, column, pie chart)

Instruction: Check if the skills are evident after training

Computational Thinker Monitoring Sheet

Student	Format the worksheet	Create Basic Formula	Use Basic Function (Average, Sum, Count, If)	Create Graphs Lines Column Pie Chart	Analyze Survey Output
3					
4					
5					
6					
7					
10					
13					
14					
16					
18					
24					
26					
28					
30					
31					
32					
36					
41					
42					
43					
44					

D. Knowledge Constructor

1. Internet Literacy

Objective: Search information in different internet resources (i.e., email, download files, install software)
Time: 60 minutes
Person Responsible: IT Teacher
Verifiable Indicator: Research information on Document

2. Google Application

Objective: Submit activities in the classroom (i.e., essays, graphics, videos)
Time: 60 minutes
Person Responsible: IT Teacher
Verifiable Indicator: Turned in and returned activities

Instruction: Check if the skills are evident after training

Knowledge Constructor Monitoring Sheet

Student	Send and receive emails	Search and download files	Search and install software	Navigate Google Applications			Navigate Classroom		
				Docs	Sheets	Slides	Essay	Graphics	Video
6									
10									
39									

E. Global Collaborator

Objective: Create and join groups
Time: 60 minutes
Person Responsible: IT Teacher
Verifiable indicator: Group List

Skills:
The activities for improving these skills involve using Google Groups.

Instruction: Check if the skills are evident after training

Global Collaborator Monitoring Sheet

Student	Add/create a group	Search for groups	Accept a group invitation	Administer a group	Send and create messages
7					
10					
13					
28					
36					

F. Digital Citizen

Objective: Write an essay per concept
Time: 60 minutes
Person Responsible: Social Science Teacher
Verifiable indicator: Essay with grammar, reference, and plagiarism check

Skills: The following are the activities to improve the skills in this standard.
1. Communication
2. Literacy
3. Etiquette
4. Security
5. Rights and Responsibilities

Instruction: Check if Accomplished

Digital Citizen Monitoring Sheet

Student	Essay	Grammar Check	Plagiarism Check
10			

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