

Profile And 21st Century Skills of Alternative Learning System Teachers

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Abstract

The government founded ALS to provide everyone with the chance to obtain and finish a basic education in a method that is suitable for their unique circumstances and requirements since every Filipino has a constitutional right to a free basic education. The ALS program would not be possible without the help of the ALS teachers, who volunteered themselves fully to teach and develop the learners' skills. ALS teachers must also acquire 21st-century skills that will help them guide and equip the learners. This research study focuses on the demographic profile of ALS teachers and their 21st-century skills. Based on the ALS curriculum and their demographic profile, which includes age, sex, work position, and civil status, this study intends to assess the 21st century competencies of ALS instructors. This research used a descriptive method of research design to provide accurate and valid results. This study includes 84 respondents. Results for overall 21st century skills of ALS teachers revealed that they are equipped with the necessary skills to help their learners develop. Furthermore, the results show that there is no significant relationship between the 21st century skills of ALS teachers and their demographic profile. On the other hand, life and career skills have a significant relationship with their age.

Keywords: 21st Century Skills, ALS teachers, Demographic Profile.

1. Introduction

Every society's fundamental building component is education. The single best investment that nations can make is to create societies that are affluent, healthy, and equal (United Nations, 2019). Since every Filipino has a constitutional right to a free basic education, the government established ALS to give everyone the opportunity to access and complete a basic education in a way that is appropriate for their individual circumstances and needs.

Some Filipinos drop out of school, while others live in communities without schools (DepEd, 2021). The government initiates ALS to give every Filipino the opportunity to access and complete basic education in a way that meets their individual circumstances and needs (Department of Education). The ALS Program is a parallel learning system that offers Filipino out-of-school children, teens, and adults a useful alternative to the country's current official education (OSCYAs) so that they can access comparable and flexible options to help them build basic and functional literacy skills (UNICEF, 2022). A range of skills are promoted by non-formal education. As a result, it aids in the social and economic advancement of a country.

Just like any other formal school, ALS also is composed of teachers. For the teachers in the Alternative Learning System (ALS), teaching includes caring for individuals who are not in school, such as inmates in prison, people with disabilities, indigenous peoples, reformers, and even guest relations employees. A licensed teacher (LET passer), a resident of the target community/division, and the ability to speak the local language are requirements for being an ALS volunteer. Additionally, a candidate has to be in good physical shape, have strong communication skills, and be open to undergoing ALS training (DepEd).

District coordinators, mobile instructors, and education program specialists working with ALS

teachers have received training in life skills, including starting a business, time management, and basic computer and ICT skills and knowledge (UNESCO, 2021). These skills are essential for the development of some new educational abilities required in our modern world. The concepts of life and career skills, learning and innovation skills, and information, media, and technology skills have also found their way into our daily lives as part of the 21st century skills (Ataberk & Mirici, 2022).

In order to increase the capacity of the ALS teachers and supervisors to provide high-quality programs to the students, SEAMEO INNOTECH led the training session. The training program seeks to improve the skills of mobile instructors and district supervisors while also fostering a greater knowledge of the evolving circumstances for ALS implementers (Seameo-innotech, 2020).

Salay, Lagonglong, and Balingasag districts accept the challenge of catering to these residents as learners of ALS. Socioeconomic information stated statistically as demographic data includes employment, education, income, marriage rates, birth rates, and death rates, among other things (Hayes, 2022). This research aims to measure the 21st century skills of ALS teachers based on the ALS curriculum and their demographic profile, which includes age, sex, employment status, and civil status to provide relevant results. The researcher investigated the significant relationship between the 21st century skills and their demographic profile to identify whether it could affect their acquisition of skills.

This study includes two variables, which are the demographic profile and the 21st century skills. Demography is the study of human populations using various concepts and methods. Measured by age and sex, demographic approaches track birth, mortality, and domestic (Rees, 2020). The researcher aims to determine whether the teachers' demographic profile has a significant relationship to their teaching skills. This will help the researcher better understand the background of the respondents involved and whether their demographic profile could affect or not 21st century skills.

One cannot succeed in the real world with just information. Teachers must also develop 21st century skills such as communication, creativity, innovation, metacognition, and problem-solving (Rahman, 2019) to be more effective in cultivating the skills of learners. The term "21st century skills" refers to the knowledge, abilities, and characteristics that are essential particularly as the learner's transition into higher education, the workforce, and adulthood. The current environment is dominated by technology and media, characterized by easy access to a wealth of knowledge, quick advancements in technological tools, and the capacity for teamwork and individual contributions. A variety of practical and critical thinking abilities are necessary for effective citizens and workers.

According to DepEd, the K–12 Curriculum for Basic Education of the formal school system and the contextualized non–formal curriculum used by the ALS Program are mostly linked, they are not exact replicas of one another. Though not identical, it is aligned. The indicators of functional literacy are reflected in six interconnected learning strands.

The independent variable – profile includes age, reemployment status and the civil status of the teachers. While the dependent variable is the 21st century skills of the teachers. These are communication skills, scientific literacy and critical thinking skills, mathematical and problem-solving skills, life and career skills, understanding the self and society, and digital literacy skills.

Communication skills are the skills people apply when providing and receiving various types of information. It is a skill that enables us to understand and communicate effectively with other people, it may be vocally, through written, or visual.

Scientific literacy and critical thinking skills is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating data gleaned from, or generated by, observation, experience, reflection, reasoning, or communication.

Mathematical and problem-solving skills are the capacity for critical, rational, and innovative thought, it is the capacity to organize and structure.

Life and career skills requires paying close attention to building the necessary life and career skills if they are to successfully traverse the challenging personal and professional contexts in the globally competitive

information era.

Understanding the self and society means developing a healthy sense of self and social responsibility that will help individuals fulfill their potential and coexist peacefully in the settings of their families, communities, and countries.

Digital literacy is the capacity of an individual to locate, assess, and share information using different media on multiple digital platforms.

2. Methodology

The researcher used a descriptive type of research method to attain the objectives set in this study. The descriptive type aims to describe a population, situation, or phenomenon accurately and systematically. To provide accurate and pertinent information, descriptive survey research uses a combination of quantitative and qualitative data. Descriptive survey design, a quick research technique, engages the subjects who are the focus of the study's goal (Voxco, 2021). This research aims to discover the acquisition of 21st century skills of ALS teachers and the descriptive type of research is appropriate. The study was describing the characteristics of the population in a particular group of people. The main focus of the descriptive method is to describe the nature of demographic profile.

For research question 1, the researcher utilized frequency and percentage to display the distribution of data grouped by the demographic profile of ALS teachers. The mean and standard deviation were employed as statistical techniques for the second research question. They serve as measures of variation and dispersion within the set of values. To identify the significant differences in the 21st century skills of ALS teachers when grouped according to demographic profile, an analysis of variance was conducted. This analysis was used to examine the differences between the two variables.

3. Results and Discussion

Problem 1. What is the demographic profile of the teachers in terms of

- 1.1 Age;
- 1.2 Sex;
- 1.3 Number of years in service; and
- 1.4 Civil status?

In addition, young teachers are considered enthusiastic. However, as they age, their enthusiasm tends to diminish, and teachers that are in their early 20s have an urge for improvement (Shilpa & Usha, 2018). It was implied that new teachers were particularly engaged and focused on their educational environments and institutions (Aung & Yan, 2019). The work of an ALS teacher requires a significant amount of energy because they need to go from house to house to distribute modules, especially in remote areas such as mountainous regions. ALS teachers have to travel from one student's house to another to distribute educational materials, such as modules. This is especially true for teachers who are assigned to remote areas like the mountains, where the homes of their students may be widely scattered.

As we can observe in the table, female teachers have a percentage of 86.9; this confirms the study by Salvan (2020) that female teachers have a larger population than male teachers in the teaching profession. This result also confirms the study by Shilpha and Usha (2018), which found that many learners felt that female teachers were easy to interact with, compassionate, and hardworking. Teachers who mostly volunteered are female. This implies that women regard the teaching profession as a vocational field that requires the concepts of caring, loving, and giving (Veronika, 2017).

Female teachers have the highest mean which indicates that they possess greater skills compared to male teachers, as teaching is a crucial task that requires knowledge and expertise (Ahmed et al., 2018). According to the study of Yenaand Allyson (2017), female teachers tend to exhibit a more nurturing and

supportive teaching style, which can positively influence their students' academic performance and overall well-being. Additionally, female teachers often demonstrate superior communication skills and are more adept at managing classroom behavior, thereby contributing to a more productive learning environment.

Table 1*Demographic Profile of the Respondents*

Indicators		Frequency	Percentage
Age	21-25	46	54.8
	26-30	20	23.8
	31-35	6	7.1
	36-40	10	11.9
	Above 40	2	2.4
Sex	Male	11	13.1
	Female	73	86.9
Number of Years in Service	1-3YRS.	73	86.9
	4-6YRS.	10	11.9
	7-10YRS.	1	1.2
Civil Status	Married	22	26.2
	Single	62	73.8
Total		84	100.0

The next variable is the length of years in service; teachers who rendered 1-3 years in service have a percentage of 86.9. According to the study of Linda et al. (2020), there is not enough evidence to prove that teachers who are beginning in their profession have fewer skills than teachers who have more experience. However, Kini and Podolsky (2016) state that teachers can improve their effectiveness as they gain experience in their teaching profession. That is why ALS teachers volunteer to gain experience that will help them in their future profession.

The table shows that single teachers are more populated, with a percentage of 73.8. It reveals that if the teacher is single or married, they are still able to actively engage and participate in their work (Basaes & Dagol, 2021). This may indicate that single or married teachers were able to acquire the skills they needed to teach effectively. This could be due to a variety of factors, such as formal education and training, professional development opportunities, and experience gained through teaching practice.

- Problem 2.** What is the level of 21st century skills of the ALS teachers based on the ALS curriculum in terms of
- 1.5 Communication Skills (English & Filipino);
 - 1.6 Scientific Literacy and Critical Thinking Skills;
 - 1.7 Mathematical and Problem Solving Skills;
 - 1.8 Life and Career Skills;
 - 1.9 Understanding the Self and Society; and
 - 1.10 Digital Literacy?

Table 2 shows the teachers' communication skills. It has an overall mean of 3.63 with SD 0.35, which is interpreted as strongly agree. This means that ALS teachers are able to understand and deliver their

instructions well to their learners. They are able to interpret what the learners wrote in their modules and work samples. The more successfully an individual can carry out these activities in the teacher's position, the better the teacher's communication skills will be.

Table 2*Communication Skills of ALS Teachers*

Indicators	Mean	SD	Description	Interpretation
1. Follow oral instructions/directions in everyday life situation	3.55	0.52	Strongly Agree	Very Positive
2. Show understanding and appreciation of conversation containing some familiar and unfamiliar vocabulary	3.60	0.54	Strongly Agree	Very Positive
3. Use everyday expressions correctly in appropriate situations	3.60	0.52	Strongly Agree	Very Positive
4. Show understanding and respect for ideas and feelings of others	3.77	0.42	Strongly Agree	Very Positive
5. Interpret properly simple common written messages, signs, symbols, words and phrases related to immediate needs or which are commonly used at work or in the community.	3.63	0.49	Strongly Agree	Very Positive
6. Respond appropriately to ideas and feelings of others through verbal and non-verbal means.	3.65	0.48	Strongly Agree	Very Positive
7. Relay correctly messages, commentaries, news accounts, announcements heard.	3.63	0.51	Strongly Agree	Very Positive
Overall	3.63	0.35	Strongly Agree	Very Positive

Note: 3.26-4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

Effective communication is an essential skill for teachers to transmit education and manage their classrooms (Khan et al., 2017). This is important because, according to Rosalyn Sword (2020), improved academic performance is dependent on effective teaching. The findings show that the highest mean score was for item 4, *Show understanding and respect for the ideas and feelings of others*, with a mean of 3.77 and a standard deviation of 0.42. This means that the respondents strongly agreed that they possess this skill and understand the importance of acknowledging and valuing the perspectives and emotions of others. All aspects of communication—listening, speaking, reading, presenting, and writing—are involved in teaching. Teachers who practice communication are better equipped to guide, counsel, and mentor the pupils entrusted to their care (Fredie Silver, 2018).

On the other hand, the lowest mean score was for item 1, *Follow oral instructions or directions in everyday life situations*, which had a mean of 3.55 and a standard deviation of 0.52. This indicates that although this score still falls within the range of *strongly agree*, it suggests that respondents may have a slightly lower level of confidence in their ability to follow oral instructions or directions. Following directions or failing to do so might impair general learning and the development of desirable proficiencies in the context of an academic environment (Sabrina et al., 2020).

It is important to note, however, that all mean scores in this section are in the range of *strongly agree*, indicating that the respondents generally possess the communication skills assessed in the survey. The small variations in mean scores between the items suggest that respondents may have slightly different levels of confidence in their abilities across different communication skills. It is important for ALS teachers to continue to develop their communication skills to effectively engage with their learners and facilitate effective learning outcomes.

Table 3 reveals scientific literacy and critical thinking skills. It has an overall mean of 3.49 with SD of 0.41, interpreted as *strongly agree*. It means that ALS teachers are able to acquire critical thinking skills. The ALS teachers have knowledge about science in solving problems and are able to analyze information. For employees who want to succeed and grow, it is essential to have the capacity to reason, think, and make wise judgments (Hart, 2018). Learners need to be engaged in science literacy and critical thinking activities, which may give them the urge to develop their thinking abilities (Vieira et al., 2016). This implies that teachers are responsible for teaching the learners to be scientifically literate and to think critically, so teachers must also acquire the skill first.

Table 3
Scientific Literacy and Critical Thinking Skills of ALS Teachers

Indicators	Mean	SD	Description	Interpretation
1. comprehend how information or ideas may be used to different circumstances or contexts	3.51	0.50	Strongly Agree	Very Positive
2. understand the constraints of our design and when to look for alternatives	3.50	0.53	Strongly Agree	Very Positive
3. analyse the arguments and supporting evidence	3.52	0.50	Strongly Agree	Very Positive
4. specify the specific information required to respond to a science inquiry question	3.52	0.50	Strongly Agree	Very Positive
5. conceive of follow-up inquiries that narrow or widen the investigation	3.43	0.52	Strongly Agree	Very Positive
6. edit drafts and provide evidence to support your changes	3.42	0.52	Strongly Agree	Very Positive
7. create follow-up inquiries to learn more about the preferences and requirements of customers or product users	3.54	0.53	Strongly Agree	Very Positive
Overall	3.49	0.41	Strongly Agree	Very Positive

Note: 3.26-4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

The highest mean score is for item 7, *Create follow-up inquiries to learn more about the preferences and requirements of customers or product users*, with a mean score of 3.54. This indicates that the ALS teachers *strongly agree* that they have the ability to create follow-up inquiries to learn more about the preferences and requirements of customers or product users. According to the study of Ilham H. et al. (2020), students' ability to engage in critical thinking relies solely on the learning environment and the learning process. On the other hand, the lowest mean score is for item 6, *Edit drafts and provide evidence to support your changes*, with a mean score of 3.42. This indicates that the ALS teachers still agree, but to a slightly lesser extent, that they have the ability to edit drafts and provide evidence to support their changes.

Table 4 shows the mathematical and problem-solving skills. It has an overall mean of 3.43 with SD of 0.42, which is interpreted as *strongly agree*. This means that these teachers are able to address problems when they are encountered in their day-to-day lives. They are able to solve problems that include mathematical problems and terminologies. They allow students to apply what they've learned to address issues in brand-new circumstances (MamtaMandal, 2018). This implies that ALS teachers should expose their learners to solving problems, especially mathematical problems.

The highest mean score is for item 1, *prepared to improve to maintain project growth*, with a mean score of 3.55. This indicates that the ALS teachers *strongly agree* that they are prepared to improve their mathematical and problem-solving skills to maintain project growth, while the lowest mean score is for item 2, *capable of addressing problems*, with a mean score of 3.37, which indicates that the ALS teachers still

agree, but to a slightly lesser extent, that they have the capability to address problems using mathematical and problem-solving skills. Sentence-based mathematical problem-solving abilities are essential because they can enhance one's capacity to solve a variety of mathematical issues encountered in daily life, foster imagination and creativity, and advance cognitive abilities (Ling & Mahmud, 2023).

Table 4
Mathematical and Problem-Solving Skills of ALS Teachers

Indicators	Mean	SD	Description	Interpretation
1. prepared to improve to maintain project growth	3.55	0.50	Strongly Agree	Very Positive
2. capable of addressing problems	3.37	0.49	Strongly Agree	Very Positive
3. shows the worth and significance of mathematics as a method of communication and problem-solving in daily life	3.42	0.52	Strongly Agree	Very Positive
4. describes the advantages of accuracy and precision in mathematics	3.42	0.56	Strongly Agree	Very Positive
5. displays integrity and accuracy while gathering and reporting data numerical data	3.48	0.53	Strongly Agree	Very Positive
6. Solves real-life problems involving fractions and mixed numbers	3.38	0.64	Strongly Agree	Very Positive
7. Makes simple predictions of events based on the results of experiments	3.38	0.56	Strongly Agree	Very Positive
Overall	3.43	0.42	Strongly Agree	Very Positive

Note: 3.26-4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

Table 5
Life and Career Skills of ALS Teachers

Indicators	Mean	SD	Description	Interpretation
1. Assess one's personal strengths /attributes /assets/limitation/interests as a potential employee	3.74	0.44	Strongly Agree	Very Positive
2. Appreciate the importance of planning for life and career development	3.73	0.45	Strongly Agree	Very Positive
3. Demonstrate effective decision-making skills in life and career planning	3.73	0.45	Strongly Agree	Very Positive
4. Demonstrate knowledge of themselves: their relationships with others, their skills, their educational plans, future dreams, and predictions for the future to develop life and career plans that include short- and long-term goals	3.70	0.46	Strongly Agree	Very Positive
5. Establish career goals	3.73	0.45	Strongly Agree	Very Positive
6. Utilize resources for exploring occupational alternatives	3.62	0.49	Strongly Agree	Very Positive
7. Determine the advantages and disadvantages of earning a living through wage employment	3.64	0.48	Strongly Agree	Very Positive
Overall	3.70	0.37	Strongly Agree	Very Positive

Note: 3.26-4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

Table 5 displays the life and career skills of ALS teachers, which are crucial for success in their profession. The overall mean score of these skills is 3.70, with a standard deviation of 0.37, indicating that teachers *strongly agree* they possess these skills. This means that they are proficient at assessing their own strengths and abilities and display excellent relationship-building and interpersonal skills.

As noted by Darling-Hammond, L. (2017), effective teaching requires the demonstration of life skills, which are essential for success in the workplace. Additionally, Chaiyama and Kaewpila (2021) suggest that students entering the workforce should possess critical life and professional skills. This underscores the importance of teachers being effective in their instruction, particularly in non-formal education programs,

where learners may require additional support in developing these skills.

Looking at the table, one can see that the highest mean scores are for items 1, 2, 3, 5, and 7, which all have a mean score of 3.73. This suggests that ALS teachers strongly agree that they possess these skills, which include assessing their personal strengths and attributes, appreciating the importance of planning for life and career development, demonstrating effective decision-making skills in life and career planning, establishing career goals, and determining the advantages and disadvantages of earning a living through wage employment.

On the other hand, the lowest mean score is for item 6, which has a mean score of 3.62. This indicates that ALS teachers still strongly agree that they possess this skill, but to a slightly lesser degree compared to the other items. This item pertains to the ability to utilize resources for exploring occupational alternatives, which is an important skill for individuals to have when considering different career paths.

Table 6 presents an understanding of the self and society. It has an overall mean of 3.66 with SD of 0.39, which is interpreted as *strongly agree*. This means that ALS teachers have a strong sense of responsibility and accountability. They are also able to recognize the potential talents and skills of their learners. Teachers' understanding of themselves is essentially important, knowing who they are inside or outside a classroom (Yagan et al., 2022). This implies that understanding themselves will help them understand their learners.

Table 6
Understanding the Self and Society of ALS Teacher

Indicators		Mean	SD	Description	Interpretation
1.	Sense of Responsibility and Accountability	3.71	0.45	Strongly Agree	Very Positive
2.	Demonstrate smooth interpersonal relationships between and among community members	3.67	0.47	Strongly Agree	Very Positive
3.	Describe the way of life or culture observed in one's community	3.63	0.49	Strongly Agree	Very Positive
4.	Recognize one's skills, talents, and abilities	3.68	0.47	Strongly Agree	Very Positive
5.	Show tolerance and respect for others despite diversity of cultures and beliefs	3.67	0.47	Strongly Agree	Very Positive
6.	Identify the effects of cultural diversity on oneself and one's group, family, community, country, and the world	3.65	0.50	Strongly Agree	Very Positive
7.	Express the importance of the contributions of ancient civilizations to the development of global awareness	3.62	0.49	Strongly Agree	Very Positive
Overall		3.66	0.39	Strongly Agree	Very Positive

Note: 3.26–4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

The highest mean score in the data is in the area of sense of *responsibility and accountability*, with a score of 3.71, indicating that the teacher *strongly agrees* that they have a sense of responsibility and accountability in their personal and professional lives. Teachers' achievements, both personally and professionally, will be elevated if an individual holds themselves personally accountable to the highest standards of teaching (Kate Dagher, 2020).

The lowest mean score is in the area of expressing *the importance of the contributions of ancient civilizations to the development of global awareness*, with a score of 3.62. Although this is the lowest score, it is still in the range of *strongly agree*, indicating that the teacher has a good understanding of the importance of

ancient civilizations' contributions to global awareness. People must comprehend how they connect with others in order to understand and interact with the social world (Catmur et al., 2016).

Table 7
Digital Literacy Skills of ALS Teachers

Indicators	Mean	SD	Description	Interpretation
1. conduct online searches	3.49	0.55	Strongly Agree	Very Positive
2. able to find the information that I want on the internet	3.58	0.52	Strongly Agree	Very Positive
3. able to produce my own texts using digital media	3.43	0.54	Strongly Agree	Very Positive
4. control the information I discover (organize, save, and store it for reuse)	3.49	0.53	Strongly Agree	Very Positive
5. combine, adapt, apply, design, and innovate to produce new works using the knowledge I have gained from it	3.57	0.50	Strongly Agree	Very Positive
6. able to interact with people by exchanging information, imparting expertise, and producing information products that are appropriate for the target market, the situation, and the medium	3.62	0.49	Strongly Agree	Very Positive
7. determine whether the data I obtain online is accurate, pertinent, and beneficial	3.56	0.52	Strongly Agree	Very Positive
Overall	3.53	0.43	Strongly Agree	Very Positive

Note: 3.26-4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

Table 7 shows the skills of digital literacy. It has an overall mean of 3.53 with 0.43 SD, which is interpreted as *strongly agree*. This means that teachers are able to identify reliable sources and information posted on a website. It also means that they are able to interact with others through the internet. Today, developing technological abilities is crucial, and a person has to identify meaningful information in electronic devices after a comprehensive review (Mukherjee, 2022). One of the most important qualities that teachers need to possess in today's culture is digital competence, which has gained significant relevance in the educational setting (Basilotta et al., 2022).

The data shows that the highest mean score was for item 6, *able to interact with people by exchanging information, imparting expertise, and producing information products that are appropriate for the target market, the situation, and the medium*, with a mean score of 3.62 and a standard deviation of 0.49. This indicates that the ALS teachers are generally confident in their ability to interact with others effectively and appropriately using digital media. Interacting with people may include video conferencing and using email (Brianna Flavin, 2021). This means that teachers must be equipped with digital technology, especially in this generation, so that giving information to the learners can be easily feasible through Facebook Messenger.

The lowest mean score was for item 3, *able to produce my own texts using digital media*, with a mean score of 3.43 and a standard deviation of 0.54. This suggests that ALS teachers may feel less confident in their ability to create their own content using digital tools. Websites, online narratives, dynamic stories, animation, and cinema are examples of more advanced multimodal text outputs in the digital age (Victoria State Government, 2022).

Table 8
Overall 21st Century Skills of ALS Teachers

Indicators	Mean	SD	Description	Interpretation
Communication Skills (English & Filipino)	3.63	0.35	Strongly Agree	Very Positive
Scientific Literacy and Critical Thinking Skills	3.49	0.41	Strongly Agree	Very Positive
Mathematical and Problem-Solving Skills	3.43	0.42	Strongly Agree	Very Positive
Life and Career Skills	3.70	0.37	Strongly Agree	Very Positive
Understanding the Self and Society	3.66	0.39	Strongly Agree	Very Positive
Digital Literacy Skills	3.53	0.43	Strongly Agree	Very Positive
Overall	3.57	0.35	Strongly Agree	Very Positive

Note: 3.26–4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 – 1.75 Strongly Disagree

Table 8 presents the overall 21st-century skills. It has an overall mean of 3.57 with 0.35 SD, which is interpreted as strongly agree. This overall result of the 21st century skills of ALS teachers implies that they are equipped to teach ALS learners (Kennedy & Sundberg, 2020). Acquiring these skills gives teachers confidence that they can effectively help and teach their learners. As the ALS teachers can now assist and impart the skills that their learners need to apply for a job and are able to compete globally (Care et al., 2019), these learners will be productive because they have a skilled ALS teacher, as Mahawas (2018) said.

Overall, learning is a continuous process that never ends. In the context of ALS teachers and their digital literacy skills, it means that even if they have acquired the necessary 21st century skills, they should continue to pursue professional development in order to stay current and keep up with the ever-evolving field of education. Education is a constantly evolving field, and new ideas, technologies, and methodologies are being introduced all the time. Therefore, it is important for ALS teachers to continuously pursue professional development opportunities in order to stay up-to-date and improve their teaching skills. In Table 8, the highest mean score is for *Life and Career skills* with a mean of 3.70, followed closely by *Understanding the Self and Society* with a mean of 3.66. Both of these areas relate to personal and interpersonal development and are critical for individuals to function effectively in society and their careers. This means that understanding the thoughts, motives, and views of others is an essential social ability for our everyday interactions as well as for navigating the problems of a worldwide society (Bockler et al., 2017).

The lowest mean score is for *Mathematical and Problem-Solving Skills*, with a mean of 3.43. This may indicate that the surveyed ALS teachers may need further support and training in this area. However, it's worth noting that a mean score of 3.43 still indicates that the majority of the surveyed teachers agree that they possess these skills at a satisfactory level. Finding answers to already-existing issues is only one aspect of problem-solving. Additionally, it involves taking the initiative when something isn't going as planned. Practice asking questions and developing curiosity about procedures and endeavors in your daily life (Kaplan et al., 2023).

Problem 3. Is there a significant difference in the 21st century skills of teachers when grouped according to demographic profile?

The study aimed to determine whether there were differences in 21st-century skills among respondents based on their profile, specifically their sex, age, civil status, and length of service. The analysis showed that there was no statistically significant difference in 21st-century skills based on sex ($F = 1.850$, $Sig = .178$). This means that there is no strong evidence to suggest that males and females have different 21st-century skills. One argument for why older people has special difficulties learning new skills is that their cognitive abilities are declining with age. This is due to the likelihood that acquiring a new skill will involve

attentional and/or storage resources connected to working memory (Raw et al., 2019). This may imply that young teachers have more capacity and ability to store new ideas. With regards to ALS, younger teachers are more needed and efficient because of the idea that teachers need to walk or ride motorcycles in order to reach their learners.

Table 9

21st Century Skills of Respondents when grouped according to their Profile

	Profile	F	Sig.	Interpretation
21st Century Skills	Sex	1.850	.178	Not Significant
	Age	4.080	.005*	Significant
	Civil Status	0.246	.621	Not Significant
	Length of Service	2.357	.101	Not Significant

*significant at 0.05 level

Moreover, the analysis showed that there was a statistically significant difference in 21st-century skills based on age ($F=4.080$, $Sig=.005$). This means that there is strong evidence to suggest that respondents of different age groups have different 21st-century skills. A person's cognitive abilities, such as retention, focus, and processing speed, can be greatly impacted by age, per a National Institute on Aging (NIA) study (NIA, 2021). It implies that young teachers have more energy in creating innovation in teaching, teachers in their early age have higher cognitive abilities. Regarding ALS teachers, they have to travel by motorcycle to reach their learners, particularly in mountainous areas where secondary education is not feasible.

The analysis also showed that there was no statistically significant difference in 21st-century skills based on civil status ($F=.246$, $Sig=.621$). This means that there is no strong evidence to suggest that respondents' marital status has an impact on their 21st-century skills. According to Basaes and Dagol (2021), there is no evidence showing that skills differ by marital status, whether a teacher is single or married. This implies that civil status does not affect the skills of a teacher. According to the data gathered, there are also married teachers in ALS who are able to actively perform their duties.

Lastly, the analysis showed that there was no statistically significant difference in 21st-century skills based on length of service ($F=2.357$, $Sig=.101$). This means that there is no strong evidence to suggest that respondents' length of service has an impact on their 21st-century skills. According to the study of Linda et al. (2020), there is no solid data to support the claim that new teachers provide lower-quality teaching. However, teachers who have served long enough have an advantage in their experience.

In summary, the study found that age was the only variable that had a statistically significant impact on 21st-century skills. The other variables, including sex, civil status, and length of service, did not have a significant impact on 21st-century skills. Overall, the skills acquisition of teachers is highly dependent on their eagerness to develop themselves professionally and their compassion for the learners that are entrusted to them.

4. Conclusions and Recommendations

Based on the summary of the findings, the researcher has drawn the following conclusions:

1. The ALS program in the three districts of Salay, Lagonglong, and Balingasag has a higher number of females who are in their early 20s, single, and have been serving for 1-3 years. This suggests that teachers who are just at the beginning of their careers gain valuable experience that will benefit them in their future profession. It provides them with insights on how to effectively handle their learners.

2. The result shows that among the mentioned skills, mathematical and problem-solving skills have the lowest mean score. This suggests that ALS teachers may not be highly equipped in this particular skill.

3. Sex, civil status, and years in service may not affect the skills of ALS teachers; however, they have an effect with regards to their age. Therefore, teachers who are in their early 20s need more time to develop and improve their skills.

Based on the summary of the findings, the researcher has made the following recommendations:

1. The ALS program should welcome and encourage teachers who are not yet part of DepEd to volunteer, as long as they meet the minimum requirements, regardless of age, gender, or civil status.

2. ALS teachers should have the opportunity to participate in conferences and workshops that can help them improve their mathematical and problem-solving skills. The government should provide suitable seminars to assist these teachers in developing this skill.

3. ALS community learning centers (CLC) should promote a Gender and Development (GAD)-oriented learning environment that encourages diverse employee backgrounds without any form of discrimination, as long as they meet the DepEd ALS minimum qualification standards.

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