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Article

Digital Competencies of Mainstream Teachers in Handling Learners with Special Educational Needs During the Reopening of Face-To-Face Classes

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Abstract: This study investigated the digital competencies of mainstream teachers in handling learners with special educational needs during the reopening of face-to-face classes. A sample of 50 mainstream teachers participated in the study, providing information on their age, gender, civil status, highest educational attainment, length of service, and field of specialization. The level of digital competencies was assessed in four key areas: information processing, communication, content creation, and problem-solving. The findings revealed that the teachers displayed a high level of digital competencies in information processing and communication, while competencies in content creation and problem-solving were at a competent level. The analysis also revealed that civil status and length of service significantly influenced the level of digital competencies, highlighting the importance of these factors in shaping teachers' abilities to effectively handle learners with special educational needs. These findings have implications for targeted training and support to enhance the digital competencies of mainstream teachers in order to provide optimal assistance to learners with special educational needs in face-to-face classroom settings.

Keywords: Digital Competencies, Mainstream Teachers, Special Educational Needs

Introduction

In the wake of the global pandemic, educational institutions worldwide experienced a significant shift in their instructional delivery, with a swift transition from traditional face-to-face classrooms to remote learning environments (Djajadiketa et al., 2021). As the world gradually recovers, schools are preparing to reopen for face-to-face classes, aiming to restore a sense of normalcy in the educational journey of students (Maaruf et al., 2023). However, this return to physical classrooms poses unique challenges, particularly for mainstream

teachers tasked with accommodating learners with special educational needs (SEN) 9 (Crispel & Kasperski, 2021: Mensah et al., 2021).

The inclusive education approach emphasizes providing equitable learning opportunities for all students, regardless of their abilities or disabilities (Norman & Zoncita, 2023: Kauffman et al., 2022). As such, it becomes crucial for mainstream teachers to possess the necessary digital competencies to effectively support and cater to the diverse needs of students with SEN during the transition back to face-to-face instruction. These digital competencies encompass a range of skills and knowledge that enable teachers to utilize technology as a powerful tool in enhancing student engagement, differentiating instruction, and creating inclusive learning environments (Cranmer, 2020).

Every child in the society requires education. The purpose of education is to help individuals who manage institutions where children, particularly those with special needs, improve their communication skills, talents, self-actualization, and productivity (Aini et al., 2023). Through programs developed in response to a learner's needs and differences from other students (Eleweke, 2022). Each special needs child has distinct needs, such as learning preferences and emotional qualities, especially those who attend inclusive schools. As a result, they require assistance in order to integrate and interact with other students in the inclusive classroom. Teachers, particularly mainstream educators who account for a major amount of inclusive education, require guidance and assistance (Paulsrud & Nilholm, 2020).

Students without disabilities share classes in the classroom, it can be extremely challenging for mainstream teachers to educate students with special educational needs (LSENSs). One of the main reasons teachers provide for leaving the field is a failure to appropriately manage and refocus disruptive behaviors (Davis et al., 2021). To help LSENs in an inclusive setting, mainstream teachers must have a number of critical skills and competencies that will allow them to be effective in dealing with these children. According to Sanusi et al. (2022) the mainstream can improve the learning of LSENs by changing their teaching approaches. Mainstream teachers should be adept in teaching approaches, methods, and processes in order to increase their preparation and stay up to date for working with LSENs in an inclusive environment (Mah et al., 2021). To mention a few, competencies include expert knowledge, teaching methods, classroom management, cooperation, assessment and evaluation, adaptive education, and support systems. Similarly, competence is a combination of different knowledge, skills, and attitudes that leads to efficient performance in a person's preferred area of human activity (Martin et al., 2019), which is why teacher competence for successful classroom management that is customized to the tasks at hand and takes into account the various learning requirements of the learners is important.

One significant research gap that exists in the field of digital competencies for mainstream teachers in handling learners with special educational needs during the reopening of face-to-face classes is the lack of comprehensive studies exploring the specific challenges and needs of teachers in this context. While there is a growing body of research examining inclusive education and the integration of technology in the classroom, limited attention has been given to the unique demands faced by teachers as they transition from remote learning to face-to-face instruction with students who have SEN. Further investigation is needed to understand the specific digital competencies required by mainstream teachers to effectively support these students in a physical classroom setting, including the challenges they encounter, strategies they employ, and the impact of their digital skills on students' learning outcomes and overall inclusion.

The Philippines is credited with pioneering inclusive education when it participated in international seminars and workshops sponsored by global organizations, with activities primarily falling under the purview of the United Nations Educational, Scientific, and Cultural Organization Even though the government provides assistance to teachers, particularly those in the mainstream who participate in inclusive education, this is insufficient to close the gap in determining whether teachers have the necessary skills to teach both children with special needs and those who do not. The state of the country demonstrates the lack of financial assistance required for them to receive adequate training in correct monitoring and evaluation, strategies, and, in particular, various abilities for managing a classroom where other LSENs are mixed with different types of children. In this context, it is vital for the government to recognize the importance of focusing on mainstream instructors to enhance the quality of education, particularly inclusive education. Many Cebu City mainstream teachers are struggling to achieve the essential competencies required to ensure that their teaching skills are not only focused on learners without special needs but also on LSENs. Researchers with experience in inclusive education recognized the importance of assessing the efficacy of general education teachers training LSENs in a selected SPED facility in Cebu. This will make it clear that they need to focus on the competencies that they need to acquire or improve to have a more effective implementation in properly teaching them, not only to the government and the Department of Education but also to the school administration and in particular, the mainstream teacher who teaches in the inclusive school.

Methodology

In this study, the descriptive correlation method was used with a detailed description of the respondents' profile, including age and gender, civil status, highest educational attainment, length of teaching

service, field of specialization, and relevant trainings and seminars attended. Also provided in this study is an in-depth description of the respondents' digital competencies in terms of information processing, communication, content creation, safety, and problem solving. It entailed gathering and studying numerical data. It used to identify trends and averages, formulate hypotheses, examine causality, and extrapolate findings to larger populations (Bhandari,2022). A survey conducted by giving questionnaires thru Google forms that adhered the safety protocols of Department of Health less the risk of Covid-19 to the mainstream teacher-respondents of the selected schools. This study utilized an adopted questionnaire, a checklist from Rabi and Zulkefli (2018). The survey questionnaire is divided into two (2) parts. Part I is on the demographic profile of the mainstream teacher – respondents with seven items. Part two (2) is focused on the level of the digital competencies of mainstream teachers which consist of five (5) sections such as: information processing with 11 questions; communication with 12-item questions; content creation with 14 questions; safety with 13 questions; and problem solving with 14 time-question. The instrument was structured in the four-point Likert scale. Respondents were directed to respond to their degree of agreement with the statements as stated in the instrument with 4 as highest or strongly agree and 1 as the lowest or strongly disagree.

Results and Discussion

Table 1. Age and Gender of the Respondents

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
56 and above	1	2.00	0	0.00	1	2.00
51-55	1	2.00	1	2.00	2	4.00
46-50	2	4.00	0	0.00	2	4.00
41-45	7	14.00	2	4.00	9	18.00
36-40	7	14.00	6	12.00	13	26.00
31-35	10	20.00	3	6.00	13	26.00
26-30	5	10.00	2	4.00	7	14.00
25 and below	2	4.00	1	2.00	3	6.00
Total	35	70.00	15	30.00	50	100.00

Table 1 presents the age and gender distribution of the respondents in the study. The sample consisted of 50 participants, with 35 identifying as female and 15 as male. The age groups of the respondents were categorized as follows: 56 and above, 51-55, 46-50, 41-45, 36-40, 31-35, 26-30, and 25 and below. The largest proportion of respondents fell into the age group of 31-35, with 20% of females and 6% of males falling within this category. The second-largest group was the 36-40 age range,

with 14% of females and 12% of males. The table provides an overview of the demographic characteristics of the respondents, which will be useful in analyzing and interpreting their perspectives and experiences regarding digital competencies in handling learners with special educational needs during the reopening of face-to-face classes.

Table 2. Civil Status of the Respondents

Civil Status	f	%
Married	28	56.00
Single	22	44.00
Total	50	100.00

Table 2 presents the civil status of the respondents in the study. The majority of the respondents, comprising 56%, reported being married, while 44% identified themselves as single. The information provided in this table provides insight into the marital status distribution of the participants, which may be relevant in understanding how their personal circumstances and responsibilities could potentially impact their experiences and perspectives on handling learners with special educational needs in the context of face-to-face classes.

Table 3. Highest Educational Attainment of the Respondents

Educational Attainment	f	%
Ph.D./Ed.D.	1	2.00
With Ph.D./Ed.D. Units	1	2.00
MA/MS	6	12.00
With MA/MS Units	32	64.00
Baccalaureate Degree	10	20.00
Total	**50**	**100.00**

Table 3 displays the highest educational attainment of the respondents in the study. The table reveals that 2% of the respondents held a Ph.D. or Ed.D. degree, while another 2% had completed Ph.D. or Ed.D. units. Additionally, 12% of the participants held a Master's degree (MA/MS), and 64% had completed units towards a Master's degree. A total of 20% of the respondents possessed a Baccalaureate degree. This information provides an overview of the educational qualifications of the participants, offering insights into the level of expertise and knowledge they bring to their roles as mainstream teachers in handling learners with special educational needs during the reopening of face-to-face classes. Understanding the educational background of the respondents is crucial in analyzing their perspectives, competencies, and potential areas for professional development and support.

Table 4. Length of Service of the Respondents

Length of service (In years)	f	%
26 and above	1	2.00
21-25	1	2.00
16-20	1	2.00
11-15	8	16.00
6-10	19	38.00
5 and below	20	40.00
Total	50	100.00

Table 4 presents the length of service of the respondents in the study. The table shows that 2% of the respondents had been in service for 26 years or more, while another 2% fell into the 21-25 years category. Additionally, 2% of the participants had a length of service between 16 and 20 years. Furthermore, 16% of the respondents had served as teachers for 11-15 years, and 38% fell into the 6-10 years category. A significant proportion of 40% had a length of service of 5 years or less. This information provides an understanding of the distribution of years of experience among the participants, which can be influential in examining their level of professional expertise, familiarity with inclusive education practices, and potential challenges they may face in handling learners with special educational needs during the reopening of face-to-face classes.

Table 5. Field of Specialization of the Respondents

Field of Specialization	f	%
Math	14	28.00
Science	7	14.00
Social Studies	7	14.00
English	6	12.00
Filipino	5	10.00
TLE	5	10.00
Accountancy	3	6.00
MAPEH	2	4.00
Religious Education	1	2.00
Total	50	100.00

Table 5 illustrates the field of specialization of the respondents in the study. The table reveals that the most common field of specialization among the respondents was Mathematics, with 28% indicating it as their specialization. Following that, Science and Social Studies were the next most prevalent fields, each representing 14% of the respondents. English and Filipino specializations accounted for 12% and 10%, respectively. Another 10% of the participants specialized in Technology and Livelihood Education (TLE). Moreover, accountancy was the field

of specialization for 6% of the respondents, while MAPEH (Music, Arts, Physical Education, and Health) constituted 4%. Only 2% of the respondents specialized in Religious Education.

Table 6. Relevant Trainings and Seminars Attended by the Respondents

Trainings and Seminars Attended	f	Rank
INSET	32	1
Seminar on Teacher's Skills Development	9	2
E-SHIELD	3	3
Mass Training	2	4

Table 6 presents the relevant trainings and seminars attended by the respondents in the study, along with the frequency and ranking of each training. The most commonly attended training was the INSET (In-Service Education and Training), with 32 respondents participating in this program. The INSET was ranked as the top training among the respondents. The second most attended training was the Seminar on Teacher's Skills Development, with 9 respondents participating, ranking it as the second most valuable training. E-SHIELD, a training focused on e-learning and digital skills, was attended by 3 respondents, ranking it third in importance. Lastly, Mass Training was attended by 2 respondents and ranked fourth. This information highlights the professional development efforts undertaken by the respondents, with the majority participating in INSET, emphasizing the significance of continuous learning and skills enhancement in addressing the challenges of handling learners with special educational needs during the reopening of face-to-face classes. The high participation of mainstream teachers in INSET demonstrates their commitment to professional development and their recognition of the importance of acquiring and enhancing digital competencies to effectively support learners with special educational needs. the findings highlight the importance of fostering a culture of continuous learning and professional growth among mainstream teachers. educational institutions can promote a supportive environment that encourages teachers to engage in ongoing professional development and share best practices. These findings provide implications for the design and implementation of professional development programs, resource allocation, and policy initiatives to equip teachers with the necessary skills and knowledge to address the challenges of inclusive education in face-to-face classroom settings.

Table 7. Level of Digital Competencies of the Respondents in terms of Information Processing

Indicators	WM	Verbal Description
I can look for information online using a search engine.	3.55	Highly Competent
I can use different search engines to find information.	3.45	Highly Competent
I can use advanced search strategies to find reliable information on the internet such as using web feeds (like RSS).	3.02	Competent
I know not all online information is reliable.	3.53	Highly Competent
I use some filters when searching to compare and assess the reliability of the information I find.	3.18	Competent
I can assess the validity and credibility of information using a range of criteria.	3.14	Competent
I can save or store files or content and retrieve them once saved or stored.	3.37	Highly Competent
I classify the information in a methodical way using folders.	3.37	Highly Competent
I backups of information or files I have stored.	3.24	Competent
I can save information found on the internet in different formats	3.22	Competent
I can use cloud information storage service	3.14	Competent

Table 7 presents the respondents' level of digital competencies in terms of information processing, measured by their mean ratings. The data indicates that the respondents possess a solid level of proficiency in various aspects of information processing using digital tools. The highest mean ratings were observed for indicators such as "I can look for information online using a search engine" (mean = 3.55) and "I know not all online information is reliable" (mean = 3.53), indicating a high level of competence in these areas. The respondents also rated themselves as highly competent in using different search engines to find information (mean = 3.45), saving or storing files and content (mean = 3.37), and classifying information using folders (mean = 3.37). While the mean ratings for indicators related to advanced search strategies, assessing validity and credibility of information, and using cloud information storage services were slightly lower, they still reflected a competent level of digital proficiency. These indicators received mean ratings ranging from 3.02 to 3.24. Overall, the respondents demonstrated a commendable level of digital competencies in information processing. They exhibited competence in fundamental tasks such as online search, information evaluation, and

file management. However, further development in advanced search strategies and utilizing cloud storage services may enhance their digital skills in handling learners with special educational needs in face-to-face classes.

Table 8. Level of Digital Competencies of the Respondents in terms of Communication

S/N	Indicators	WM	Verbal Description
1	I can communicate with others using Facebook or chat –using basic features (e.g. voice messaging, SMS, text exchange).	3.73	Highly Competent
2	I can use advanced features of several communication tools (e.g. using Facebook and sharing files).	3.55	Highly Competent
3	I actively use a wide range of communication tools (e-mail, chat, SMS, instant messaging, blogs, micro-blogs, social networks) for online communication.	3.45	Highly Competent
4	I can share files and content using simple tools.	3.49	Highly Competent
5	I can use collaboration tools and contribute to e.g. shared documents/files someone else has created.	3.33	Highly Competent
6	I can create and manage content with collaboration tools (e.g. project management systems, online spreadsheets)	3.16	Competent
7	I know I can use online services (e.g., e-banking, e-governments, e-hospitals...etc.).	3.39	Highly Competent
8	I use features of online services (e.g. public services, e-banking, online shopping …etc.).	3.25	Highly Competent
9	I actively participate in online spaces and use several online services (e.g. public services, e-banking, online shopping…etc.).	3.25	Highly Competent
10	I am aware of social networking sites and online collaboration tools.	3.33	Highly Competent
11	I pass on or share knowledge with others online	3.25	Highly Competent
12	I can use advanced features of communication tools	3.39	Highly Competent

Table 8 presents the level of digital competencies of the respondents in terms of communication, as indicated by their mean ratings. The data reveals that the respondents possess a high level of competence in various aspects of digital communication. The indicators related to basic and advanced features of communication tools received the highest mean ratings. "I can communicate with others using Facebook or chat, using basic features" obtained a mean rating of 3.73, followed closely by "I can use advanced features of several communication tools"

with a mean rating of 3.55. The respondents also demonstrated a high level of competence in actively using a wide range of communication tools and sharing files and content using simple tools, as indicated by mean ratings ranging from 3.45 to 3.49. Moreover, the respondents expressed competency in utilizing collaboration tools, participating in online spaces, and using online services such as e-banking, public services, and online shopping. These indicators received mean ratings ranging from 3.16 to 3.39, signifying a solid level of digital competence in these areas. Overall, the respondents demonstrated a commendable level of digital competencies in communication. They exhibited a high level of proficiency in using a variety of communication tools, both basic and advanced, and actively participating in online spaces. Their awareness of social networking sites and online collaboration tools further contributed to their overall competence. These digital communication competencies equip the respondents with the necessary skills to effectively engage and communicate with learners with special educational needs during the reopening of face-to-face classes.

Table 9. Level of Digital Competencies of the Respondents in terms of Content Creation

S/N	Indicators	WM	Verbal Description
1	I can produce simple digital content (e.g. text, tables, images, audio files) in at least one format using digital tools.	3.31	Highly Competent
2	I can produce complex digital content in different formats (e.g. text, tables, images, audio files).	3.20	Competent
3	I can use tools for creating webpages or blogs.	2.75	Competent
4	I can produce complex, multimedia content in different formats, using a variety of digital tools and environments.	2.76	Competent
5	I can create a website using a programming language.	2.45	Less Competent
6	I can apply basic formatting (e.g. insert footnotes, charts, tables) to the content I or others have produced.	3.16	Competent
7	I can use advanced formatting functions of different tools (e.g. mail merge, merging documents of different formats, using advanced formulas, macros).	2.86	Competent
8	I know that content can be covered by copyright.	3.35	Highly Competent

9	I know how to reference and reuse content covered by copyright.	2.92	Competent
10	I know how to - and when is necessary to - apply licenses and copyrights.	2.88	Competent
11	I can modify simple functions of software and applications as changing default settings.	2.82	Competent
12	I know the basics - principles- of one programming language.	2.59	Competent
13	I can use several programming languages.	2.51	Competent
14	I know how to design, create and modify databases with a computer tool.	2.59	Competent

Table 9 presents the level of digital competencies of the respondents in terms of content creation, as indicated by their mean ratings. The data reveals that the respondents possess varying levels of competence in different aspects of content creation using digital tools. The indicators related to producing digital content received moderate mean ratings. The respondents expressed a high level of competence in producing simple digital content, such as text, tables, images, and audio files (mean = 3.31). However, their competence decreased slightly when it came to producing complex digital content in different formats (mean = 3.20). In terms of web-related skills, the respondents rated themselves as moderately competent. They reported being able to use tools for creating webpages or blogs (mean = 2.75), but showed less proficiency in producing complex, multimedia content using a variety of digital tools and environments (mean = 2.76). Similarly, creating a website using a programming language received a lower mean rating of 2.45, indicating a lower level of competence in this area. Moreover, the respondents demonstrated a moderate level of competence in content formatting, copyright awareness, and basic programming knowledge. They reported being competent in applying basic formatting to content (mean = 3.16) and having knowledge about copyright (mean = 3.35). However, their mean ratings were lower for indicators related to using advanced formatting functions, referencing and reusing copyrighted content, and applying licenses and copyrights. Overall, the respondents showed a moderate level of digital competencies in content creation. They displayed proficiency in producing simple digital content and applying basic formatting, but their competence decreased when it came to complex content creation, web-related skills, and programming knowledge. Enhancing their skills in these areas would enable them to create more advanced and engaging content, effectively utilizing digital tools to support learners with special educational needs in face-to-face classes.

Table 10. Level of Digital Competencies of the Respondents in terms of Safety

Indicators	WM	Verbal Description
I can take basic steps to protect my devices (e.g., using anti-viruses and passwords).	3.18	Competent
I have installed security programmed on the device(s) that I use to access the Internet.	2.96	Competent
I frequently check the security configuration and systems of my devices and/or of the applications I use on a regular basis to access the Internet.	2.78	Competent
I am aware that my credentials (username/password) can be stolen.	3.41	Highly Competent
I know I should not reveal private information online.	3.67	Highly Competent
I use different passwords to access equipment, devices and digital services and I modify them on a periodic basis. o I know how to react if my computer is infected by a virus.	3.20	Competent
I can configure or modify the firewall and security settings of my digital devices.	2.75	Competent
I know that using digital technology too extensively can affect my health.	3.47	Highly Competent
I understand the health risks associated with the use of digital technology (e.g., risk of addiction).	3.57	Highly Competent
To avoid health problems (physical and psychological), I can make use of information and communication technology.	3.45	Highly Competent
I take basic measures and actions to save energy.	3.53	Highly Competent
I understand the positive and negative impact of technology on the environment.	3.63	Highly Competent
I have an informed stance on the impact of digital technologies on everyday life and the environment	3.49	Highly Competent

Table 10 presents the level of digital competencies of the respondents in terms of safety, specifically focusing on protecting devices, online privacy, and understanding the impact of digital technology on health and the environment. The respondents exhibited a competent to highly competent level of digital safety competencies. Regarding device security, the respondents demonstrated competence in taking basic steps to protect their devices, such as using antivirus software and passwords (mean = 3.18). They also indicated competence in installing security programs on their devices (mean = 2.96) and being aware of the potential theft of their credentials (mean = 3.41). However, their competence was slightly lower in frequently checking security configurations and systems (mean = 2.78). The respondents expressed

a high level of competence in online privacy. They demonstrated a highly competent understanding of the importance of not revealing private information online (mean = 3.67) and using different passwords for access, modifying them periodically (mean = 3.20). In terms of safety and health, the respondents displayed a highly competent level of understanding the health risks associated with excessive digital technology use (mean = 3.57) and the positive and negative impact of technology on health and the environment (mean = 3.63). They also reported being highly competent in taking measures to save energy and having an informed stance on the impact of digital technologies on everyday life and the environment (mean = 3.49). Overall, the respondents demonstrated a competent to highly competent level of digital safety competencies. They showed awareness and took appropriate steps to protect their devices and online privacy. Furthermore, their understanding of the impact of digital technology on health and the environment indicates a responsible and informed approach. Strengthening their competencies in areas such as checking security configurations and systems could further enhance their overall digital safety practices in handling learners with special educational needs during face-to-face classes.

Table 11. Level of Digital Competencies of the Respondents in terms of Problem Solving

S/N	Indicators	WM	Verbal Description
1	I find support when a technical problem occurs or when using a new program.	2.90	Competent
2	I can solve most of the more frequent problems that arise when using digital technologies.	2.63	Competent
3	I can solve almost all problems that arise when using digital technology	2.53	Competent
4	I know that digital tools can help me in solving problems.	3.14	Competent
5	I can use digital technologies to solve (non-technical) problems.	3.02	Competent
6	I can frequently choose the right tool, device, application, software or service to solve (non-technical) problems.	2.98	Competent
7	When confronted with a technological problem, I can use tools I know to solve it.	2.78	Competent
8	I can solve technological problems by exploring the settings and options of programmes or tools.	2.96	Competent
9	I am aware of new technological developments.	2.98	Competent

10	I understand how new tools work.	2.88	Competent
11	I am aware that I need to update my digital skills regularly.	3.53	Highly Competent
12	I regularly update my digital skills.	3.02	Competent
13	I am aware of my limits and try to fill my gaps.	3.41	Highly Competent
14	I frequently update my digital skills to decrease my limits and increase my digital knowledge	3.22	Competent

Table 11 presents the level of digital competencies of the respondents in terms of problem-solving, particularly focusing on their ability to solve technical and non-technical problems using digital technologies. The respondents exhibited a competent level of digital problem-solving competencies. The indicators related to problem-solving proficiency received moderate mean ratings. The respondents reported competence in finding support when encountering technical problems or using new programs (mean = 2.90) and being able to solve most frequent problems arising from digital technology use (mean = 2.63). Additionally, they expressed competence in understanding that digital tools can aid in problem-solving (mean = 3.14) and using digital technologies to solve non-technical problems (mean = 3.02). The respondents demonstrated a moderate level of competence in choosing the appropriate tools, devices, applications, software, or services to solve non-technical problems (mean = 2.98). They also displayed competence in exploring settings and options of programs or tools to solve technological problems (mean = 2.96). Moreover, awareness of new technological developments and the need for regular skill updates received moderate mean ratings, indicating a competent level of understanding (mean = 2.98 and 3.53, respectively). However, respondents reported a slightly lower level of updating their digital skills regularly (mean = 3.02). Moreover, the respondents expressed a highly competent awareness of their own limits and a commitment to filling knowledge gaps (mean = 3.41). They reported frequently updating their digital skills to decrease limitations and enhance their digital knowledge (mean = 3.22).

Table 12 presents the results of the test of relationship between the profile of the respondents and their level of digital competencies. The table shows the computed -values, p-values, and decisions based on the null hypothesis (Ho) for each profile variable: age, gender, civil status,

highest educational attainment, length of service, and field of specialization. The findings indicate that age and gender are not significantly related to the level of digital competencies, as their computed -values exceed the significance level ($p > 0.05$).

Table 12. Test of Relationship between the Profile of the Respondents and their Level of Digital Competencies

Profile	df	χ^2 -value	p - value	Decision	Remarks
Age	6	12.466	0.052	Accept Ho	NS
Gender	6	3.181	0.204	Accept Ho	NS
Civil Status	2	15.420*	0.000	Reject Ho	S
Highest Educational Attainment	4	2.689	0.611	Accept Ho	NS
Length of Service	4	15.099*	0.005	Reject Ho	S
Field of Specialization	10	9.048	0.528	Accept Ho	NS

*significant at $p<0.05$

However, civil status and length of service show significant relationships with the level of digital competencies. For civil status, the computed -value is significant ($p < 0.05$), indicating that there is a relationship between civil status and digital competencies. Similarly, length of service also shows a significant relationship with digital competencies, as the computed -value is below the significance level ($p < 0.05$). On the other hand, the highest educational attainment and field of specialization variables are not significantly related to the level of digital competencies, as their computed -values exceed the significance level ($p > 0.05$). Moreover, the analysis reveals that civil status and length of service have a significant relationship with the level of digital competencies, while age, gender, highest educational attainment, and field of specialization do not. These findings suggest that civil status and length of service may play a role in shaping the digital competencies of mainstream teachers in handling learners with special educational needs during face-to-face classes.

Table 13 presents the results of the test of significant difference on the level of digital competencies of the respondents when grouped according to their gender. The table provides information on the source of variation, sum of squares, degrees of freedom (df), mean square, F-value, p-value, and the result. The analysis reveals that there is no significant difference in the level of digital competencies between male

and female respondents. The between-groups variation, represented by the sum of squares of 1392.077, was not found to be statistically significant with an F-value of 1.588 and a p-value of 0.214.

Table 13. Test of significant difference on the Level of Digital Competencies of the Respondents when grouped according to their Gender

Source of variation	Sum of squares	df	Mean square	F-value	p-value	Result
Between groups	1392.077	1	1392.077	1.588	0.214	Not Significant
Within groups	42069.943	48	876.457			
Total	43462.020	49				

*Significant at p< 0.05

Furthermore, the within-groups variation, represented by the sum of squares of 42069.943, accounts for the individual differences within each gender group. Overall, the test indicates that gender does not have a significant impact on the level of digital competencies among the respondents. This suggests that both male and female mainstream teachers possess similar levels of digital competencies when it comes to handling learners with special educational needs during the reopening of face-to-face classes.

Table 14. Test of significant difference on the Level of Digital Competencies of the Respondents when grouped according to their Age

Source of variation	Sum of squares	df	Mean square	F-value	p-value	Result
Between groups	11759.799	3	3919.933	5.688	0.002	Significant
Within groups	31702.221	46	689.179			
Total	43462.020	49				

*Significant at p< 0.05

Table 14 presents the test of significant difference on the level of digital competencies of the respondents when grouped according to their age. The table provides the source of variation, sum of squares, degrees of freedom (df), mean square, F-value, p-value, and the result. The test results indicate that there is a significant difference in the level of digital competencies among the respondents when grouped according to their age. The between-groups variation, represented by the sum of squares of 11759.799, was found to be significant with an F-value of 5.688 and a p-value of 0.002. Furthermore, the within-groups variation, represented by the sum of squares of 31702.221, accounted for the individual differences within each age group. Overall, the test suggests that age

has a significant influence on the level of digital competencies among the respondents. It implies that different age groups may have varying levels of digital competencies when handling learners with special educational needs during the reopening of face-to-face classes.

Table 15. Test of significant difference on the Level of Digital Competencies of the Respondents when grouped according to their Civil Status

Source of variation	Sum of squares	df	Mean square	F-value	p-value	Result
Between groups	14108.952	1	14108.952	23.072	*0.000	
Within groups	29353.068	48	611.522			Significant
Total	43462.020	49				

*Significant at p< 0.05

Table 15 presents the test of significant difference on the level of digital competencies of the respondents when grouped according to their civil status. The table provides the source of variation, sum of squares, degrees of freedom (df), mean square, F-value, p-value, and the result. The test results indicate that there is a significant difference in the level of digital competencies among the respondents when grouped according to their civil status.Moreover, the between-groups variation, represented by the sum of squares of 14108.952, was found to be significant with an F-value of 23.072 and a p-value of 0.000. Furthermore, the within-groups variation, represented by the sum of squares of 29353.068, accounted for the individual differences within each civil status group. Overall, the test suggests that civil status has a significant influence on the level of digital competencies among the respondents. It implies that there is a notable difference in digital competencies between respondents with different civil statuses when handling learners with special educational needs during the reopening of face-to-face classes.

Table 16. Test of significant difference on the Level of Digital Competencies of the Respondents when grouped according to their Highest Educational Attainment

Source of variation	Sum of squares	df	Mean square	F-value	p-value	Result
Between groups	590.870	2	295.435	.324	.725	
Within groups	42871.150	47	912.152			Not Significant
Total	43462.020	49				

*Significant at p< 0.05

Table 16 presents the test of significant difference on the level of digital competencies of the respondents when grouped according to their highest educational attainment. The table provides the source of variation, sum of squares, degrees of freedom (df), mean square, F-value, p-value, and the result. The test results indicate that there is no significant difference in the level of digital competencies among the respondents when grouped according to their highest educational attainment. The between-groups variation, represented by the sum of squares of 590.870, was not found to be significant with an F-value of 0.324 and a p-value of 0.725. Furthermore, the within-groups variation, represented by the sum of squares of 42871.150, accounted for the individual differences within each highest educational attainment group. Overall, the test suggests that highest educational attainment does not have a significant influence on the level of digital competencies among the respondents. It implies that there is no substantial difference in digital competencies between respondents with different levels of educational attainment when handling learners with special educational needs during the reopening of face-to-face classes.

Table 17. Test of significant difference on the Level of Digital Competencies of the Respondents when grouped according to their Length of Service

Source of variation	Sum of squares	df	Mean square	F-value	p-value	Result
Between groups	12558.270	1	12558.270	19.506	0.000	Significant
Within groups	30903.750	48	643.828			
Total	43462.020	49				

*Significant at p< 0.05

Table 17 presents the test of significant difference on the level of digital competencies of the respondents when grouped according to their length of service. The table provides the source of variation, sum of squares, degrees of freedom (df), mean square, F-value, p-value, and the result. The test results indicate that there is a significant difference in the level of digital competencies among the respondents when grouped according to their length of service. The between-groups variation, represented by the sum of squares of 12558.270, was found to be significant with an F-value of 19.506 and a p-value of 0.000. Furthermore, the within-groups variation, represented by the sum of squares of 30903.750, accounted for the individual differences within each length of service group. Overall, the test suggests that length of

service has a significant influence on the level of digital competencies among the respondents. It implies that there is a notable difference in digital competencies between respondents with different lengths of service when handling learners with special educational needs during the reopening of face-to-face classes.

Table 18 presents the test of significant difference on the level of digital competencies of the respondents when grouped according to their field of specialization. The table provides the source of variation, sum of squares, degrees of freedom (df), mean square, F-value, p-value, and the result. The test results indicate that there is no significant difference in the level of digital competencies among the respondents when grouped according to their field of specialization. The between-groups variation, represented by the sum of squares of 7962.544, was not found to be significant with an F-value of 1.974 and a p-value of 0.101.

Table 18. Test of significant difference on the Level of Digital Competencies of the Respondents when grouped according to their Field of Specialization

Source of variation	Sum of squares	df	Mean square	F-value	p-value	Result
Between groups	7962.544	5	1592.509	1.974	0.101	Not Significant
Within groups	35499.476	44	806.806			
Total	43462.020	49				

*Significant at p< 0.05

Furthermore, the within-groups variation, represented by the sum of squares of 35499.476, accounted for the individual differences within each field of specialization group. Overall, the test suggests that the field of specialization does not have a significant influence on the level of digital competencies among the respondents. It implies that there is no substantial difference in digital competencies between respondents with different fields of specialization when handling learners with special educational needs during the reopening of face-to-face classes.

Conclusion

Based on the analysis of the data, the study explored the digital competencies of mainstream teachers in handling learners with special educational needs during the reopening of face-to-face classes. The findings from the various tables provide valuable insights. In terms of the respondents' profiles, age and gender were found to have no significant relationship with the level of digital competencies. However, civil status and length of service were identified as significant factors influencing digital competencies. Regarding specific

digital competencies, the respondents showed a high level of competence in information processing and communication, with mean ratings indicating a highly competent level. They also demonstrated competence in content creation and problem-solving. However, their competencies in safety and technical aspects were at a slightly lower, yet still competent, level. The test of relationship between the profile of the respondents and their digital competencies revealed that civil status and length of service significantly influenced digital competencies, while age, gender, highest educational attainment, and field of specialization did not. This suggests that factors such as marital status and length of service play a role in shaping the digital competencies of mainstream teachers. In conclusion, mainstream teachers possess varying levels of digital competencies in handling learners with special educational needs during face-to-face classes. Factors such as civil status and length of service have a significant impact on these competencies. To ensure effective support for learners with special educational needs, it is crucial to provide targeted training and support for teachers to enhance their digital competencies, particularly in areas where improvements are needed, such as technical skills and safety awareness. Additionally, considering the influence of civil status and length of service, tailored professional development programs should be implemented to address the specific needs of teachers based on their profiles.

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