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Social Science Teachers' Instructional and Assessment Challenges in the New Normal

**Francis Dave N. Mabborang^{a*}, Jasper Kim M. Rabago^b,
Carolyn G. Paguyo^b, Imelda L. Najorda^b
and Ronald Candy S. Lasaten^b**

^a Apayao State College, Luna, Apayao, Philippines.

^b Mariano Marcos State University, Laoag City, Ilocos Norte, Philippines.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The study aimed to explore the instructional and assessment challenges experienced by social science teachers in higher education institutions in the new normal, particularly in the Cordillera Administrative Region (CAR) in the Philippines. The study used the research and development (R&D) methodology and underwent three stages, namely the planning, design, and analysis stages. The researcher utilized one research instrument in the form of a survey checklist as a tool for gathering data for the study. The majority of respondents were young, with one to five years of teaching experience, and the number of years in service was a determinant of having designations. Teachers experienced instructional challenges due to the pandemic, such as the delivery of content and the use of technology. To address these challenges, schools need to improve their learning management system (LMS) and assess performance tasks. Assessment challenges include

*Corresponding author: E-mail: SirFDMofApayaoStateCollege@gmail.com;

preparing assessment tasks and identifying assessment criteria. It is in the implementation and authenticity of assessment results that teachers find it difficult to decide on the final grade. Age is negatively correlated with instructional challenges, while age is positively correlated with difficulty in time management and adjusting to the demands of students with special needs. The number of years in service and academic rank are linked to difficulty finding activities that fit the student's level, while academic rank is associated with faster assessment forms. This research shows how important it is to give teachers the right training and opportunities for professional growth, as well as the technical infrastructure and support they need to use technology effectively for instructional delivery and assessment purposes.

Keywords: *Social science teachers; instructional challenges; assessment challenges; higher education institutions; learning management systems (LMS); pandemic; professional growth; technology in teaching.*

1. INTRODUCTION

The recent pandemic has brought a lot of societal changes in the modern era particularly in instructional delivery across all levels. The quality of instruction has been compromised as not all educational institutions were then ready especially teachers in addressing the individual needs of learners. The outright challenge in the latter months of the pandemic to the transition to the new normal setting or the post pandemic world lies on the readiness of teachers in teaching the subject matter and the validity and reliability not only of the developed and downloaded test materials but also their assessment practices. Basic education was hit hard by these challenges and so with higher education institutions local and abroad.

With this, colleges and universities, not only the basic education, must respond to the massive disruption caused by COVID-19 to the educational system for the last two years since the first quarter of 2020. Higher education institutions are being urged to create a resilient learning system in the new normal utilizing data that is both evidence- and need-based so that proactive and responsive measures may be put in place. COVID-19's implications in higher education institutions necessitate a range of viewpoints from all parties involved most especially the main actors in instructional delivery- the teachers.

Universities must begin to comprehend and identify the short-, medium-, and long-term effects of the pandemic on teaching, learning, student experience, infrastructure, operation, and staff. The issues that each university is currently facing require scenario analysis and a grasp of its context [1].

Clinging to the needs of the present, in times of crisis, universities must be robust. In the educational system, resilience is the capacity to endure difficulties of all kinds, including trauma, tragedies, and crises, and to emerge stronger, wiser, and more powerful personally [2]. The Philippine educational system must get ready to create strategies for moving forward and dealing with the post-crisis new normal. Higher education must address teaching and learning continuity during and after the epidemic if it is to be resilient. The possibility of coming up with diverse programs geared toward addressing and sustaining the needs of teachers in their profession is dependent on the readiness of HEIs in assessing the current condition of these actors in education. Through a documentation of their experiences in the post pandemic world of tertiary social science education, these teachers would mainly contribute to the existing body of knowledge where experiences of this group are significant after an era of pandemic and this would be the first of its kind.

Looking into the microlens such that of the social sciences teachers in HEIs is essential whether there is a significant effect of the post pandemic era to their practices and how these practices could affect the learners in many different ways.

Thus, this study examined the difficulties and problems that the COVID-19 pandemic had brought with regard to the continuity of teaching and learning in higher education in the Philippines, particularly on the challenges encountered by social science teachers along instruction and assessment.

1.1 Statement of the Problem

This study was conducted to explore the social science teachers' instructional and assessment

challenges in the new normal in Higher Education Institutions (HEIs). Specifically, it answered the following questions:

1. What is the profile of the teachers in terms of:

- 1.1 age;
- 1.2 gender;
- 1.3 number of years in service;
- 1.4 trainings attended;
- 1.5 designations and other assignments;
- and
- 1.6 academic rank?

2. What are the challenges faced by social science teachers in the new normal along:

- 2.1 instruction; and
- 2.2 assessment?

3. Is there a significant relationship between the teachers' profile and their perceived challenges along instruction and assessment?

4. What are the implications of this study to teaching and learning particularly in the field of the social sciences in higher education institutions (HEIs)?

1.2 Significance of the Study

The study identified the instructional and assessment challenges experienced by teachers in the different HEIs of the country. With the shift of instructional delivery from online teaching back to face-to-face vis-à-vis the continued use of blended or flexible learning, this study is of importance to both teachers, students, administrators and researchers.

This study attempted to improve the quality of instruction and assessment strategies of teachers in various HEIs to make learning more meaningful to students through an analysis of their existing practices which may or may not contribute to a healthy disposition for them as teachers that could also and eventually affect their learners' learning conditions. Results of the study aimed to help teachers become more competent and choose more effective strategies in the teaching and learning process particularly along instruction and assessment.

As for the students, the study holds significant importance as they are the main actors in the teaching and learning process. Identifying the

instructional and assessment challenges of teachers will make the learning process attain the goal of educational success in a specific field of study such as in the teaching of social science courses in colleges, if needed a shift to a more proactive strategy. It is expected that with the teacher's enhanced capability for instruction and assessment in the new normal, the learners will be able to think critically and thus appreciate more the disciplines in the various social science courses.

Also, the participation of school administrators and researchers in the professional development of faculty is crucial in this new normal, and therefore, they too have a significant role to play. This study is significant to them as they will be given the chance to re-focus on the needs of teachers as to instruction and assessment thereby engaging and empowering teachers to recalibrate and retool their prior knowledge fit for advanced teaching in higher education in the new normal. The value of education is more important than ever as HEIs in the different parts of the world continue to develop mechanisms on what instructional and assessment strategies suit best their population of college learners. Their roles as heads, researchers and implementers of funded studies and implementation of programs are much needed as support system for teachers. Thus, this study will be the basis of future researchers in conducting similar studies along the exploration of instructional and assessment challenges of teachers in the new normal and beyond not only in the social sciences but also in other fields of specialization.

1.3 Scope and Delimitations

The study focused on the identification of instructional and assessment challenges of social science teachers in various HEIs in the new normal. The study was conducted in selected HEIs in the Cordilleras using a survey checklist and the respondents were teachers assigned with social science courses in the participating HEIs.

The variables in the study were analyzed using different statistical tests. The demographic profile of the respondents such as age, gender, number of years in service, trainings attended, designations and other assignments, and academic rank was obtained to describe their composition via descriptive and inferential statistics.

One instrument in the form of a survey checklist specifically measuring the instructional and assessment challenges of teachers in the new normal aided the study.

The major limitation of the study was that results are not general and specific to all social science teachers teaching in various state colleges and universities in the Philippines and in any part of the world.

2. METHODOLOGY

This presents the research design, locale of the study, population and sampling procedures, research instruments, data gathering procedure, statistical treatment of data and ethical consideration.

2.1 Research Design

This study used the research and development (R&D) methodology. The R and D model comprises creative work systematically undertaken to increase knowledge, including knowledge to devise new techniques and applications, particularly in teaching and learning [3]. Specifically, the descriptive-correlational research design was employed in the identification of social science teachers' instructional and assessment challenges in the new normal. Descriptive-correlational research design is a type of quantitative research design. In this type of design, the researcher collects data on variables of interest and uses statistical analyses to identify relationships between them.\

2.2 Locale of the Study

The study was conducted in state colleges and universities in the six provinces of the Cordillera Administrative Region (CAR). The tertiary schools composed the total number of state colleges and universities strategically located in the Cordillera Administrative Region that are categorized as State Universities and Colleges (SUCs) under the Commission of Higher Education (CHED).

2.3 Population and Sampling Procedures

Data was collected and interpreted from the responses of the teachers from the various HEIs in the Cordillera Administrative Region (CAR). Universal sampling or total enumeration was employed covering all social science teachers who were respondents in the study.

2.4 Research Instrument

The researcher utilized one research instrument in a form of survey checklist as tool in gathering data for the study namely the Survey Checklist on the Instructional and Assessment Challenges of Social Science Teachers in HEIs in the New Normal. The survey instrument was organized based on the results of scientific studies as to the instructional and assessment challenges of teachers before and during the COVID-19 pandemic. The results of the studies of Dayagbil, Palompon, Garcia and Olvido (2021) and Metin (2013) became the springboard of the researcher in crafting the research instrument.

2.5 Data Gathering Procedure

The researcher started with the collection of data after the approval of the panel on the oral defense of the Master of Arts in Education major in Social Studies program of the MMSU Graduate School. After the issuance of certification from the University Research Ethics Review Board (URERB), the researcher started with the data gathering at the participating schools. The researcher had two modes of data gathering: an electronic-generated survey and an on-site paper-and-pencil survey. The researcher analyzed the results using descriptive and inferential statistics, respectively, and drew inferences and identified the implications based on the results for tertiary education, particularly on instruction and assessment.

2.6 Statistical Treatment of Data

The data gathered in the study was analyzed using descriptive statistics such as frequency, percentage, mean, and standard deviation. Inferential statistics were used to test the relationship between the variables under investigation. The respondents were asked to investigate the various instructional and assessment challenges in teaching social science courses and rate them according to how they relate to their current experiences as facilitators of learning in the new normal through a four-point Likert scale with corresponding descriptive interpretations.

3. RESULTS AND DISCUSSION

The portion encompasses the demographic profile of social science teachers, such as their age, gender, number of years in service, trainings attended, designations, and academic

rank. Additionally, it explores the challenges that social science teachers face in the new normal with regards to instruction and assessment. It analyzes and examines whether there is a significant relationship between the teacher's profile and their perceived challenges in instruction and assessment. Finally, it delves into the implications of the study for teaching and learning.

3.1 Demographic Profile of Social Science Teachers in the Higher Educational Institutions in the Cordillera Administrative Region in the New Normal

Understanding the characteristics of social science instructors might give insights into their adaptation experiences, problems and possibilities. Table 1 presents the demographic profile of social science teachers categorized as to their age, gender, teaching experience, relevant trainings attended, school administrative designations and other assignments and functions, and academic rank.

3.1.1 Age

Table 1 shows that majority (47 or 58.8%) of the respondents' age are 21-30 years old, followed by 31-40 years old (16 or 20%), then 51 years old and above (10 or 12.5%), and lastly 41-50 years old (7 or 8.8%), compromising the population of the State College and University Social Science teachers in the Cordillera Administrative Region.

The age distribution of social science educators in the Philippines demonstrates that younger instructors dominate the profession, with the majority of respondents aged 21 to 40 [4]. However, the teaching profession has a high attrition rate, which may have an impact on teacher supply and demand, and a past study revealed that the majority of instructors leave within the first five years [5]. When comparing the age distribution of social science professors in the Philippines to that of other countries in Asia, Africa, and Latin America, considerable discrepancies emerge. In China, for example, in-service teachers were much older than pre-service teachers, but in South Korea, social studies instructors were typically evenly dispersed [6,7]. On the other hand, the age distribution of Kenyan Social Studies instructors was heavily skewed towards the elderly, and it

was similarly unbalanced in Chile [8,9]. These disparities underscore the need for developing successful teacher recruitment and retention methods that take into account the particular demands and characteristics of the teaching profession in each context.

3.1.2 Gender

The study indicates that 57 of the 80 State College and University Social Science teachers in the Cordillera Administrative Region are female: they account for seventy-one and three tenths (71.3%) of the total population whereas males (22 or 22.5%) and LGBTQ+ members (1 or 1.3%) follow.

A survey in the Philippines found that 64.7% of social science professors were female, while male instructors made up 36.8% of the population [10]. In China, women made up 66.7% of social science professors, while men made up 33.3% [11]. In the education and teaching professions, Europe had 68% female instructors [12], whereas Latin America had 73.8% female elementary school teachers [13]. 67% of social science professors in the United States were female, while 33% were male [14]. However, there was no data on LGBTQ+ professors, and research implies that the number of LGBTQ+ instructors may be underreported [15]. This study's high proportion of female instructors and low proportion of male and LGBTQ+ lecturers is consistent with the global trend of a significant female presence in higher education.

3.1.3 Number of years in service

The State College and University Social Science teachers in the Cordillera Administrative Region have a big difference in the distribution of teaching experience when grouped into six categories. Forty-seven (58.8%) respondents have 1-5 years teaching experience, sixteen (20%) respondents have 6-10 years teaching experience, ten (12.5%) respondents have 11-15 years teaching experience, three (3.8%) respondents have 16-20 years teaching experience, three (3.8%) respondents have 21-25 years teaching experience and one (1.3%) respondent have more than 26 years teaching experience.

Across nations and regions, the distribution of teaching experience among social science professors varies. According to the study's

results [16], the majority of social science instructors had at least one to five years of teaching experience, accounting for 58.8% of all respondents. This indicates that the teaching staff in this subject area is likely to be younger and less experienced than those with more years of experience in the teaching profession at HEIs. The majority of social science instructors in the Philippines have fewer than 5 years of experience, with just 14.9% having more than 15 years of experience [17]. Similarly, the majority of social science professors had 1 to 5 years of experience [18]. The majority of social science instructors in Turkey have 1–10 years of experience, with only 2.8% having more than 20 years [19]. In Taiwan, however, the majority of instructors have more than ten years of experience, with 43.6% having 11–20 years [20]. The proportion of social science teachers with teaching experience varies by country and location, but current data indicates that many teachers may have limited expertise in instructional delivery, which may impact teachers' professional development needs as well as the quality of education provided to college students [21].

3.1.4 Relevant trainings attended

In case of State College and University Social Science teachers' trainings in relation to social science education, 45 out of 80 social science teachers are without relevant trainings attended: They constituted fifty-six and three tenths-percent (56.3%) of the total population. There are 35 (43.8%) social science teachers that have attended relevant trainings on the other hand.

Studies on the professional development of social science teachers suggest that many have not obtained the necessary training in recent years. This lack of training is visible in various countries, including Pakistan [22], the Philippines [23,24,25, and 26], Turkey [28], and Spain [29], whereas social studies teachers in Japan [27] and Norway [30] have greater access to professional development opportunities. Social studies teachers in Brazil have limited access to training [31], but those in Mexico have government-funded programs for regular training and assistance [32]. It is critical to identify the variables that contribute to these differences in social studies teacher preparation and to find effective solutions to improve their training internationally.

3.1.5 School administrative designations and other assignments

While for State College and University Social Science teachers with school administrative designations, 65 out of 80 social science teachers are without designation. They constituted eighty-one and three tenths-percent (81.3%) of the total population. There are 15 (18.8%) social science teachers that have designations.

According to research, the majority of social science lecturers in the Philippines do not have administration positions [33]. On the other hand, those in administrative positions have higher levels of job satisfaction, stronger connections with coworkers, and are more likely to participate in professional development activities [33,34]. They were also more likely to use creative teaching techniques and technology in their classes, as well as to feel encouraged and appreciated [34,35]. Social science professors without administrative positions, on the other hand, may feel undervalued and ignored, as well as lacking access to required resources and professional development opportunities [36,37]. These data imply that administration roles can have major ramifications for social science instructors and that teachers with administrative designations are more likely to have excellent career outcomes.

3.1.6 Academic rank

In this study, it is evident that majority (59 or 73.8%) of the State College and University Social Science teachers' academic rank was Instructor, followed by Associate Professor (9 or 11.3%), Assistant Professor (8 or 10%), and Professor (4 or 5%) compromising the population study of the social science teachers of State Colleges and Universities in the Cordillera Administrative Region.

The majority of social science instructors are at the instructor level [38]. However, inequalities in teaching strategies and outcomes have been discovered among instructors in various academic positions around the globe. According to research conducted in the Philippines [39] and Saudi Arabia [40], associate professors and professors were more content and motivated with their professions than instructors and assistant professors. In the Philippines [41] and Pakistan [42], assistant professors and professors were shown to be more successful than instructors

and associate professors in terms of teaching efficacy. In contrast, research in the United States [43] and Malaysia [44] revealed no significant differences in teaching quality, job satisfaction, or instructional effectiveness across academic classes. Understanding the experiences and activities of social science educators requires taking academic rank into account.

3.2 Instructional Challenges faced by Social Sciences Teachers in the Higher Educational Institution in the Cordillera Administrative Region (CAR) in the New Normal

This discussion provides information on the instructional challenges that social science teachers experience in higher education institutions (HEIs) in the Cordillera Administrative Region. The data is organized into five categories: (IC-1) Intensifying the Use of Technology in Teaching; (IC-2) Testing and Upgrading the Technological Infrastructure; (IC-3) Capacitating Teachers; (IC-4) Attending to

Diverse Learners; and (IC-5) Migrating to Flexible Teaching and Learning. A detailed literature review and interviews with HEI instructors in the region were conducted to identify the range of these categories.

3.2.1 Intensifying the use of technology in teaching

The results show that the respondents generally disagreed that they had instructional challenges with the intensification of technology use, as evidenced by the average mean score of 2.163. Specifically, the majority of the respondents did not find it difficult to deliver their lessons due to limited access to technology in the classroom (mean score of 2.538), did not experience problems completing instructional requirements due to ICT implementation (mean score of 2.363), did not find it challenging to engage themselves in the use of the latest technology in teaching (mean score of 1.888), and did not have difficulty using their smartphones' mobile apps for instruction (mean score of 1.863).

Table 1. Distribution of demographic profile of social science teachers in higher educational institution (HEIs) in the cordillera administrative region (CAR)

Profile		Frequency	Percent
Age	21-30 years old	47	58.80
	31-40 years old	16	20.00
	41-50 years old	7	8.80
	51 and above	10	12.50
	Total	80	100.00
Gender	Male	22	27.50
	Female	57	71.30
	LGBTQ+	1	1.30
	Total	80	100.00
No. of Years	1-5 years	47	58.80
	6-10 years	16	20.00
	11-15 years	10	12.50
	16-20 years	3	3.80
	21-25 years	3	3.80
	26 and above	1	1.30
	Total	80	100.00
Trainings Attended	Without	45	56.30
	With	35	43.8
	Total	80	100.0
Designation	Without	65	81.3
	With	15	18.8
	Total	80	100.0
Academic Rank	Instructor	59	73.8
	Assistant Professor	8	10.0
	Associate Professor	9	11.3
	Professor	4	5.0
	Total	80	100.0

The findings of studies on technology integration in education have been mixed. According to certain research, social science teachers in Pakistan and Malaysia have a good attitude toward technology integration and have not encountered significant technical challenges [45,46]. Other studies, however, have discovered that instructors face challenges in integrating technology, notably in terms of infrastructure, training, and technical support, as demonstrated in India and Saudi Arabia [47,48]. Instructors in Switzerland and Kuwait have experienced a variety of challenges, including a lack of time, technical assistance, and training [49,50]. The current study, on the other hand, discovered that social science instructors in the Cordillera Administrative Region did not suffer significant challenges while utilizing mobile applications for instruction, in contrast to South Korean teachers who had concerns with mobile device use [51]; To successfully incorporate technology into educational approaches, constant guidance and training are essential.

3.2.2 Testing and upgrading the technological infrastructure

The results of a survey of state college and university social science teachers in the Cordillera Administrative Region show that they have to deal with a number of teaching challenges when it comes to testing and upgrading technological infrastructure. The mean score for this item was 2.683, indicating that instructors generally agree that they face challenges in this area. Most of the problems that instructors face have to do with how they use the learning management system (LMS) and how well they can connect to the internet. Most of the people who answered (2.725) agreed that they had technical problems when using the LMS. This was followed by them agreeing they have an existing LMS (2.663), but have difficulty accessing the LMS due to poor connectivity (2.663).

The study shows the difficulties that instructors confront in many countries, including Taiwan [52,53], Kuwait [54], Pakistan [55], China [56], the United States [57], Yemen [58], Malaysia [59] and South Korea [60]. Technical obstacles, poor connectivity, and pedagogical concerns all have a detrimental influence on teacher performance and motivation. To overcome these issues, the study suggests that teachers obtain training in digital tools and that educational institutions offer enough technological infrastructure and support

to encourage effective teaching approaches. Furthermore, public college and university social science professors in the Cordillera Administrative Region reported comparable difficulties with the LMS and poor connectivity [61].

3.2.3 Capacitating teachers

In general, respondents disagreed that they have an instructional challenge such as a need to capacitating teachers with an average mean of 2.469. The majority of the respondents did not believe that there was a need to re-tool themselves with knowledge and understanding of their own subject (2.538) and their instructional practices (2.525). They also found it not difficult to manage their time, especially when attending conferences and seminars (2.425) and advancing their professional development (2.388).

The study examines teachers' differing perspectives on the importance of professional growth in areas such as teaching techniques, topic knowledge, and time management. While some studies have found that teachers have a low perceived need for professional development in these areas [62,63,64], others have found a strong demand for such development [65,66,67]. Differences in context, such as grade level and instructor subject area, may alter the outcomes [68]. The study proposes that teacher education and professional development opportunities should be better aligned with teachers' actual needs and views.

3.2.4 Attending to diverse learners

In general, respondents disagree that they have an instructional challenge in attending to diverse learners, with an average mean of 2.158. The majority of the respondents did not believe that teaching in a multicultural setting meant having to sacrifice their personal time in order to attain expected learning outcomes (2.450). They also did not find difficulty adjusting and handling a class with some students having special needs (2.113), as well as finding no difficulty in attending to a diverse group of learners (1.913).

Previous studies have shown that teachers who get adequate training and support may effectively educate students from varied backgrounds [69,70]. Other research, however, has revealed that instructors may need greater help in this area [71,72]. Instructors with good attitudes

toward diversity and inclusion are more likely to adapt their instruction to meet the needs of various learners [73], and instructors with positive attitudes toward inclusive education are more likely to provide inclusive instruction to students with disabilities [74]. Teachers who have a strong sense of self-efficacy are also more effective at meeting the needs of diverse students [75,76]. The study underlines the importance of more research to develop effective approaches to assist teachers in meeting the requirements of diverse types of pupils.

3.2.5 Migrating to flexible teaching and learning

In general, respondents disagree that they have an instructional challenge in migrating to flexible teaching and learning, with an average mean of 2.521. In support, the majority of the respondents did not experience difficulty in online teaching or instruction with the use of internet connectivity in schools (2.375), did have internet connection at home (2.238), and had innovations when it came to flexible instructional delivery (1.863). However, the majority of the respondents also believed that face-to-face teaching is the best mode of

instructional delivery (3.075), believed that they have difficulty accessing learning resources for their class in the absence of an internet connection (2.823), and believed that flexible instruction will entail an additional cost in the long run (2.788).

Because of the COVID-19 epidemic, many schools throughout the world have converted to flexible teaching and learning. However, there are still challenges to overcome, such as a lack of access to learning resources and the belief that face-to-face training is superior. According to studies, while flexible learning offers advantages, it also has drawbacks that must be addressed. Digital literacy, access to technology, reliable internet connectivity, and proper training and support for instructors and students, for example, are significant challenges in the Philippines [77,78], South Korea [79], Saudi Arabia [80], Algeria [81], Singapore [82], Nigeria [83], Pakistan [84], India [85], and Serbia [86]. Overall, flexible learning provided educational possibilities throughout the epidemic, but it also revealed discrepancies and limits in technology availability, digital literacy, and teacher and student training and support.

Table 2. Item mean rating showing the instructional challenges faced by social science teachers in the various higher educational institutions (HEIs) in the cordillera administrative region (CAR)

Challenges Encountered by Teachers	Mean Rating	Descriptive Rating
A. Instructional Challenges		
<i>IC-1.Intensifying the Use of Technology in Teaching</i>		
1. I find it difficult to engage myself in the use of the latest technology in teaching.	1.888	Disagree
2. I experience having difficulty in using my smartphone's mobile apps for instruction.	1.863	Disagree
3. I experience having problems completing instructional requirements due to ICT limitation (e.g. knowledge of .	2.363	Disagree
4. I have difficulty delivering my lessons due to limited access to technology in the classroom (e.g. LCD projector, audio equipment.	2.538	Disagree
IC 1 Composite Mean	2.163	Disagree
<i>IC-2.Testing and Upgrading the Technological Infrastructure</i>		
5. There is an existing LMS in our school.	2.663	Agree
6. I find difficulty accessing our LMS due to poor internet connectivity.	2.663	Agree
7. I experience technical glitches in the use of our LMS.	2.725	Agree
IC 2 Composite Mean	2.683	Agree
<i>IC-3.Capacitating Teachers</i>		
8. I find it difficult for me to advance my professional development because it is too expensive and at times I cannot afford it.	2.388	Disagree
9. I believe there is a need to re-tool myself along knowledge and understanding of my main subject/field.	2.538	Disagree
10. I believe there is a need to-retool myself along knowledge and understanding of instructional practices (knowledge mediation) in my main subject/field.	2.525	Disagree

Challenges Encountered by Teachers	Mean Rating	Descriptive Rating
11. I find difficulty in time management especially when it comes to attending conferences and seminars along instruction due to many intervening reasons both personal and professional (e.g. financial, health conditions, family-related, etc.).	2.425	Disagree
IC 3 Composite Mean	2.469	Disagree
<i>IC-4. Attending to Diverse Learners</i>		
12. I have difficulty attending to diverse group of learners.	1.913	Disagree
13. I experience handling a class with some students having special needs and I find it difficult adjusting to their demands.	2.113	Disagree
14. I believe that teaching in a multicultural setting means having to sacrifice your personal time in order to attain expected learning outcomes.	2.450	Disagree
IC 4 Composite Mean	2.158	Disagree
<i>IC-5. Migrating to Flexible Teaching and Learning</i>		
15. I do not have innovations when it comes to flexible instructional delivery.	1.863	Disagree
16. I experience having difficulty in online teaching or instruction with the use of internet due to poor internet connectivity in schools.	2.375	Disagree
17. I do not have internet connection at home for many reasons (e.g. no hotspot area, economic reasons, etc.)	2.238	Disagree
18. I believe flexible instruction will entail an additional cost to teachers in the long run.	2.788	Agree
19. I have difficulty in accessing learning resources for my class if there is no internet connection.	2.823	Agree
20. I believe face-to-face teaching is the best compared to all other modes of instructional delivery.	3.075	Agree
IC 5 Composite Mean	2.521	Disagree

Legend: Range of Mean Descriptive Interpretation

3.41 – 4.00 Strongly Agree (SA)

2.61 – 3.40 Agree (A)

1.81 – 2.60 Disagree (D)

1.00 – 1.80 Strongly Disagree (SD)

3.3 Assessment Challenges Encountered by Social Science Teachers in the Higher Educational Institution (HEIs) in the Cordillera Administrative Region in the New Normal

The table below provides information on the assessment challenges that social science teachers encounter in higher education institutions (HEIs) in the Cordillera Administrative Region. The data is organized into four categories: (AC-1) preparing the assessment task; (AC-2) determining the assessment criteria; (AC-3) implementing performance tasks; and (AC-4) assessing performance tasks. A detailed literature review and interviews with HEI teachers in the region were conducted to obtain results in this discussion.

3.3.1 Preparing the assessment tasks

Based on the average mean score of 2.416, the results showed that most of the people who filled

out the survey did not agree that they had trouble preparing assessment tasks. Specifically, the majority of the respondents did not encounter issues with the various tools of technology as aid in assessment preparation (2.600), did not experience difficulty preparing flexible assessment tasks that could address both the needs of on-site and online learning (2.488), did not experience difficulty in preparing appropriate performance tasks for the different subjects as they were handling more than one course preparation (2.300), and did not experience difficulty in determining activities that were fit to the student's level (2.275).

Assessment planning is an essential component of higher education teaching and learning. Supporting assessment literacy development [87] is essential for assisting teachers in developing efficient test preparation strategies. According to research, teachers in Philippine colleges may struggle to create reliable evaluation tools due to insufficient training [88] and unique assessment

concepts and practices [89]. Integrating timely and thorough feedback [90], professional development opportunities [91], collaborative work settings [91], and integrating feedback [92], on the other hand, can improve assessment preparation and increase student engagement and motivation. Assessment validity and reliability may be increased further by connecting learning objectives with assessment activities [93], employing exam wrappers [94], and introducing formative assessments that are matched with learning outcomes [95]. Furthermore, proctoring with formative feedback can boost student engagement and motivation while also increasing exam validity and reliability [96].

3.3.2 Determining the assessment criteria

The results showed that the respondents generally disagreed that they had challenges with the determination of assessment criteria, as evidenced by the average mean score of 2.292. Majority of the respondents disagreed that they were interested in learning more about the importance of rubrics in the assessment of student learning (2.425), did experienced being able to determine the appropriate assessment criteria (2.250), and did not experience difficulty in knowing how to prepare appropriate rubrics for certain specific assessment tasks (2.200).

According to research undertaken in the Philippines [97,98], Malaysia, Pakistan [99,100], China, and Indonesia [102,103], many instructors lack the knowledge and skills required to develop effective assessment methods and evaluation criteria. Teachers in Australia, on the other hand, thought that assessment criteria increased the quality of assessment and student learning results [101]. To improve student learning outcomes, the United States requires clear and precise assessment criteria [104], whereas the United Kingdom requires teacher training and help to improve assessment methods and develop clear and exact assessment criteria [105]. These findings imply that the level of knowledge and abilities necessary to produce assessment criteria varies among countries and that teacher training is crucial to improving assessment methods in the classroom.

3.3.3 Implementing performance tasks

The results showed that the respondents generally agreed that they experience assessment challenges such as in implementing performance tasks with an average mean score

of 2.838. Majority of them encountered students copying the work of others or their learning activities and homework lifted from the internet and other sources, as well as having a lot of students in their classes (3.088). However, majority of them disagreed that they experience difficulty implementing their assessment activities due to lack of physical environment and technological facilities (2.600). They also disagreed that using assessment forms are sometimes time-consuming (2.525).

Several studies have been undertaken in various countries to study the difficulties that instructors confront while using performance-based evaluations in their classrooms. Due to a lack of clear guidelines for designing and evaluating performance tasks, EFL teachers had difficulty creating assignments that effectively evaluated student learning, and similar difficulties were found in implementing performance-based assessments in Malaysian schools and Nigerian classrooms [106–108]. Teachers in the Philippines struggled to create curriculum-related and culturally relevant activities, while the implementation of performance-based assessments in Hong Kong primary schools ran into difficulties measuring a wide range of learning outcomes and providing constructive feedback [109–110]. Due to a lack of training and assistance, Mexican and Chinese instructors struggled with task design and evaluation, whereas Taiwanese teachers struggled with task design and assessment due to a lack of defined standards [111–113]. Adopting performance-based assessments in South Korean classrooms was difficult due to a lack of time for developing and assessing assignments, as well as the need for clear rules and administrative assistance, whereas Rwandan teachers struggled with task design and evaluation due to a lack of training, support, time, and resources [114–115]. A survey of social science instructors at state colleges and universities, on the other hand, discovered that the physical environment and technical equipment were not substantial barriers to implementing performance-based evaluations.

3.3.4 Assessing performance tasks

The results showed that the respondents generally agreed that they have assessment challenges in assessing performance tasks with an average mean score of 2.666. Majority of the respondents believed that assessment made on-site is more objective compared to other alternative modes (2.850). They also agreed that they experienced not being able to give feedback

on time to recently concluded performance tasks due to personal and work-related reasons (2.738) as well as experienced not being able to assess objectively due to overlapping activities and other assignments as required by their designation (2.650). However, majority of them disagreed that they have not yet mastered the rudiments of performance assessment (2.425).

Table 3. Item Mean rating showing assessment challenges faced by social science teachers in the higher educational institutions (HEIs) in the cordillera administrative region (CAR) in the new normal

Challenges Encountered by Teachers	Mean Rating	Descriptive Rating
B. Assessment Challenges (ACs)		
<i>AC-1. Preparing the Assessment Tasks</i>		
1. I experience difficulty in determining activities that are fit to the students' level.	2.275	Disagree
2. I experience difficulty in preparing appropriate performance tasks for the different subjects as I am handling more than one course preparation.	2.300	Disagree
3. I encounter issue(s) in the use of the various tools of technology as aid in assessment preparation.	2.600	Disagree
4. I experience difficulty preparing flexible assessment tasks that could address both the needs of on-site and online learning.	2.488	Disagree
AC 1 Composite Mean	2.416	Disagree
<i>AC-2. Determining the Assessment Criteria</i>		Disagree
5. I experience not being able to determine appropriate assessment criteria.	2.250	Disagree
6. I experience difficulty in knowing how to prepare appropriate rubric for certain specific assessment tasks.	2.200	Disagree
7. I am into learning more on the importance of rubric in the assessment of student learning.	2.425	Disagree
AC 2 Composite Mean	2.292	Disagree
<i>AC-3. Implementing Performance Tasks</i>		
8. I have a lot of students in my class, if not too many.	3.088	Agree
9. I use assessment forms that are sometimes time-consuming.	2.525	Disagree
10. I experience difficulty implementing my assessment activities due to lack of physical environment and technological facilities.	2.600	Disagree
11. I encounter students copying the work of others or their learning activities and homeworks lifted from the internet and other sources.	3.138	Agree
AC 3 Composite Mean	2.838	Agree
<i>AC-4. Assessing Performance Tasks</i>		
12. I experience not being able to assess objectively due to overlapping activities and other assignments as required by my designation(s).	2.650	Agree
13. I experience not being able to give feedback on time to recently concluded performance tasks due to personal and work-related reasons.	2.738	Agree
14. I believe that assessment made on-site is more objective compared to other alternative modes.	2.850	Agree
15. I understand and recognize that I have not yet mastered the rudiments of performance assessment.	2.425	Disagree
AC 4 Composite Mean	2.666	Agree

Legend: Range of Mean Descriptive Interpretation

3.41 – 4.00 Strongly Agree (SA)

2.61 – 3.40 Agree (A)

1.81 – 2.60 Disagree (D)

1.00 – 1.80 Strongly

Disagree (SD)

A review of research conducted in many countries discovered that teachers experience obstacles in assessing performance tasks, such as a lack of specific criteria and rubrics, which is comparable to studies conducted in Indonesia [116]. Teachers also experience a lack of knowledge and abilities, according to research done in Nigeria [117]. Furthermore, instructors in the United States struggle to assess performance tasks because learning goals and evaluations do not align [118]. Teachers also face challenges such as a lack of resources and infrastructure [117]), a lack of communication and collaboration between teachers and assessment specialists [119], time constraints and workload management [116], and a lack of alignment between assessments and classroom instruction [120], which may vary depending on the local context and educational system. The analysis underlines the need for context-specific solutions to improve instructors' assessment procedures.

3.4 Relationship Between the Teachers' Profile and their Perceived Challenges Along Instruction and Assessment

The link between a teacher's profile and their perceived problems in instruction and assessment is an important topic of research in the field of education. Instructors come from varied backgrounds, with varying degrees of experience, training, and education. These variables can impact their perspective of the obstacles they confront in the classroom, including controlling student behavior, devising successful evaluations, and tailoring the curriculum to suit the needs of various learners. Knowing the link between a teacher's profile and their perceived obstacles can influence the development of customized professional development and support programs to help instructors overcome these challenges and enhance student results.

3.4.1 Correlation between the demographic profile of respondents and their perceived instructional challenges

Age is negatively correlated with IC-1.3 (I experience problems completing instructional requirements due to ICT limitations). This means that completing instructional requirements due to ICT limitations is not really a problem as they age. The statement suggests that age may be linked to problems with using ICT to finish

educational requirements. This means that as people get older, they may become better at using technology to finish educational tasks. However, studies on the connection between age and technology use are mixed, with some studies showing that older people have more difficulty using technology, while others find no major age-related variations in technology use.

For example, older people were less likely to use social media and mobile devices [121], but other studies found no substantial age-related differences in technology adoption [122,123]. Furthermore, the relationship between age and technology use may be influenced by other variables such as schooling, income, and previous exposure to technology. For example, older adults with higher levels of education and income were more likely to use technology for health-related reasons than those with lower levels of education and income [124].

Age is positively correlated with IC-2.6 (I find difficulty accessing our LMS due to poor internet connectivity.) ; IC-3.11 (I find difficulty in time management, especially when it comes to attending conferences and seminars along with instructions, due to many intervening reasons both personal and professional (e.g., financial, health conditions, family-related, etc.). ; IC-4.13 (I experience handling a class with some students having special needs, and I find it difficult to adjust to their demands); and IC-5.15 (I do not have innovations when it comes to flexible instructional delivery.).

Older teachers tend to have difficulty accessing their LMS due to poor internet connectivity; difficulty in time management; difficulty handling a class with some students having special needs and difficulty adjusting to their demands; and a lack of innovations when it comes to flexible instructional delivery. Recent studies on the relationship between age and instructional challenges have yielded conflicting findings. For example, senior instructors (aged 56–65) have greater difficulty using digital tools, such as accessing their LMS, than their younger peers [125]. Similarly, older instructors (aged 51–65) have more difficulty with time management due to a heavier caseload and personal obligations, such as family responsibilities [126]. Other studies, however, have found that older instructors are more adaptable and innovative in their teaching methods than younger teachers. For example, senior teachers (aged 55 and older) were more likely than younger teachers to

use innovative teaching methods and adjust to shifting conditions [127]. Furthermore, older instructors (aged 50 and up) reported greater degrees of work satisfaction and motivation than their younger peers [128]. This could be because older teachers have more experience and expertise, which allows them to navigate the complexities of teaching more effectively. Overall, these findings indicate that while age can present some challenges for teachers, it is not always a determining factor in how well they perform in their role. Nonetheless, schools should provide assistance and instruction to all teachers, regardless of age, to help them improve their abilities. In this manner, educators can continue to develop their skills and improve the standard of teaching and learning for their students.

Another variable is gender which is negatively correlated with IC-1.1 (I find it difficult to engage myself in the use of the latest technology in teaching.) This means that gender affects the engagement in the use of latest technology in teaching. According to research, gender is an element that can influence student involvement in the use of cutting-edge technology in the classroom. For example, female instructors may be less likely to interact with technology due to societal and cultural factors that link technology with male-dominated professions [129]. Similarly, female instructors reported lower levels of trust and self-efficacy when using technology in the classroom [130]. This indicates that gender may have a negative correlation with IC-1.1, implying that female teachers may find it more difficult to participate in the use of cutting-edge technology in the classroom than their male peers. Other studies, however, have discovered mixed findings regarding the effect of gender on student engagement with technology in the classroom. For example, no substantial variation in the use of technology in instruction between male and female teachers [131]. Similarly, while male teachers claimed greater levels of confidence in using technology, there was no substantial difference between male and female teachers in terms of their actual use of technology in the classroom [132]. Overall, the relationship between gender and engagement with technology in teaching appears to be complex, and more study is required to completely comprehend the variables that contribute to this relationship. Nonetheless, schools and educational organizations should take measures to ensure that all instructors, regardless of gender, receive the required support and training

to successfully integrate technology into their teaching practices.

Number of years in service on the other hand is negatively correlated with IC-1.3 (I experience having problems completing instructional requirements due to ICT limitation). This means that if the length of service increases, the problems in completing instructional requirements due to ICT limitation lessens. (If the length of service decreases the problems in completing instructional requirements due to ICT limitation heightened.) According to research, the number of years someone has been working can affect how hard it is for them to finish their education requirements because of ICT issues.

Instructors with more years of experience were more likely to have a positive outlook toward using technology in their instruction and to have gotten technology integration training [133]. This means that teachers who have been in the profession longer may have a better understanding of how to use technology in the classroom and may be less likely to have trouble meeting educational requirements due to ICT limitations, which have a negative relationship with IC-1.3.

Other studies, on the other hand, have discovered that the connection between years of service and technology incorporation is not always simple. For example, while experienced teachers may know more about and be better at using technology, they may also be less open to change and have developed teaching methods that make it harder to use technology [134]. This means that teachers with more experience may still find it hard to meet teaching requirements because of ICT limitations, especially if they do not get enough help or training on how to integrate technology.

Number of years in service is positively correlated with IC-3.11. (I find difficulty in time management especially when it comes to attending conferences and seminars along instruction due to many intervening reasons both personal and professional (e.g. financial, health conditions, family-related, etc.).) This means that if the length of service increases the difficulty in time management especially when it comes to attending conferences and seminars along instruction due to many intervening reasons both personal and professional also increases likewise if the length of service decreases the difficulty in time management especially when it

comes to attending conferences and seminars along instruction due to many intervening reasons both personal and professional also decreases. In contrast to the previous finding, studies show that the number of years of service is favorably linked to the experience of trouble with time management, particularly when it comes to attending workshops and seminars in addition to teaching. Teachers who had been in service for a longer period of time reported more difficulties with time management, such as difficulty balancing professional and personal obligations, attending conferences and seminars, and staying up to date with new instructional practices [135]. This implies that instructors with more years of experience may encounter more time-management difficulties, resulting in a positive correlation with IC-3.11.

Other studies have found the same thing, which shows how hard it is for instructors with different levels of experience to manage their time well. Teachers with more years of experience may have to deal with unique challenges when it comes to managing their time [136]. For example, they may have to find a way to meet the needs of different stakeholders and continue their own professional development while also meeting the needs of their students. While seasoned instructors may have an abundance of knowledge and skill, they may also face higher challenges in terms of time management and having professional development opportunities, resulting in a positive association with IC-3.11.

The designation as another variable is negatively correlated with IC-1.3. (I experience problems completing instructional requirements due to ICT limitations.) This means that if they have a designation, the problems in completing instructional requirements due to ICT limitations will become easier. Or if they do not have a designation, the problems in completing instructional requirements due to ICT limitations become even harder.

The results show that instructors with titles are less likely to have trouble meeting teaching requirements due to ICT limitations, while those without titles are more likely to have such problems. However, there has been little study on the link between teaching designation and ICT proficiency. Teachers with higher-level jobs,

like chief teacher or principal, were more likely to use technology in their teaching than teachers with lower-level jobs [137]. The research, on the other hand, did not look directly at the link between designation and ICT proficiency or at whether or not ICT limitations made it hard to finish educational tasks. Other studies have found that an instructor's ICT competency is affected by their access to technology, their training opportunities, and their own attitudes and beliefs [138]. While the findings suggest a negative correlation between designation and IC-1.3, more research is required to fully understand the relationship between these factors as well as the specific mechanisms by which teacher designation may influence ICT competency and the experience of difficulties in completing instructional requirements.

Academic rank on the other hand is negatively correlated with IC-1.3. (I experience problems completing instructional requirements due to ICT limitations.) This means that if the academic rank is high, the problems in completing instructional requirements due to ICT limitations become easier. (Or if the academic rank is low, the problems in completing instructional requirements due to ICT limitations become harder.)

According to the results, teachers with a higher academic rank are less likely to have trouble meeting teaching requirements due to ICT limitations, while teachers with a lower academic rank are more likely to have such problems. This fits with what a previous study found, which showed a positive link between academic rank and ICT skills [139]. Teachers with a higher academic rank said they used technology in their classes more often than teachers with a lower academic rank [140]. The research found that teachers with a higher academic rank were more likely to take part in personal development opportunities related to technology.

These results indicate that teachers with a better academic rank may have greater access to ICT instruction and tools. It is important to remember, though, that academic standing is not the only thing that affects ICT skills. Access to technology, training chances, and individual views and ideas are also important variables [138].

Table 4. Showing correlation coefficient between the demographic profile of respondents and their perceived instructional challenges

Linear (Profile & ICs)	Age	Gender	No. of Years in Service	Trainings Attended	Designation	Academic Rank
IC-1.1	0.04	-.254*	0.069	-0.067	0.028	0.152
IC-1.2	-0.03	0.04	0.022	-0.143	0.003	0.004
IC-1.3	-.320**	0.05	-.245*	-0.109	-.241*	-.229*
IC-1.4	-0.02	0.008	-0.004	-0.123	0.063	0.066
IC-2.6	.221*	-0.071	0.176	0.058	0.205	0.159
IC-2.7	0.083	0.029	0.076	-0.006	0.041	-0.02
IC-2.8	0.173	0.156	0.157	0.046	0.148	0.182
IC-3.8	-0.046	-0.104	-0.059	-0.019	-0.079	-0.053
IC-3.9	0.08	0.148	0.079	0.136	0.08	0.066
IC-3.10	-0.031	0.037	-0.023	-0.013	0.049	-0.018
IC-3.11	.221*	0.036	.230*	0.152	0.216	0.183
IC-4.12	0.144	-0.066	0.064	0.171	-0.073	0.044
IC-4.13	.252*	0.013	0.213	0.168	0.14	0.107
IC-4.14	0.021	0.219	0.001	-0.024	0.091	-0.002
IC-5.15	.251*	0.105	0.168	0.188	0.1	0.091
IC-5.16	0.042	-0.105	0.01	0.059	-0.025	0.013
IC-5.17	0	-0.103	-0.01	0.119	0.018	-0.037
IC-5.18	-0.008	-0.132	-0.059	0.016	0.009	-0.019
IC-5.19	0.123	-0.046	0.059	0.062	0.094	0.074
IC-5.20	-0.044	0.017	-0.066	0.147	-0.039	0.049

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

3.4.2 Correlation between the demographic profile of respondents and their perceived assessment challenges

The number of years in service is negatively correlated with AC-1.1 (I experience difficulty determining activities that are fit to the students' level.) This means that the longer or greater the number of years of experience, the easier it is to determine activities that are appropriate for the students' level. The results show that teachers with more experience are less likely to have trouble finding tasks that are right for their students' levels, while teachers with less experience are more likely to have trouble doing this. This is consistent with an earlier study, which showed a favorable relationship between teaching experience and instructional efficacy [141]. Teachers with more years of experience were more likely to use a wider range of teaching methods, such as ones that were student-centered and tailored to the needs of each student [142]. These results imply that instructors with more years of experience may be more adept at tailoring their instructional approaches to their students' needs and abilities. It is important to remember, though, that years of experience are not the only thing that affects how well a

teacher teaches. Other variables, such as teacher preparation, topic expertise, and classroom management abilities, are also important [143].

Academic rank is negatively correlated with AC-1.1 (I experience difficulty determining activities that are fit to the students' level.) (Sometimes, these forms are time-consuming.) This means that the lower their academic rank, the more difficult it is for them to determine activities that are appropriate for their level. According to the statement, there is a negative relationship between academic rank and AC-1.1. This means that teachers with lower academic ranks may have a harder time finding tasks that are right for their students' skill levels. Instructors with advanced degrees and more teaching experience do a better job [144]. This result backs up their findings. According to the authors, instructors with higher scholastic ranks may have more subject matter expertise and a better grasp of pedagogical techniques, enabling them to better tailor their training in line to their students' requirements.

A teacher's experience is a good predictor of student success, especially for students who come from poor families [145]. This means that

as teachers get more experience, they will be better able to meet the different needs of their students. For example, they will be better able to give students tasks that are right for their level.

Academic rank is also positively correlated with AC-3.9 (I use assessment forms that are sometimes time-consuming.) This means that the higher the academic rank, the more they use assessment forms that are sometimes time-consuming. Studies in the Philippines have also looked into the connection between scholastic rank and evaluation difficulties in the classroom. A better academic rank is a good sign that a student's learning results are being evaluated in a more efficient and effective way [146].

In a similar way, using a variety of ways to test and grade students in the classroom is linked to better grades [147]. Higher academic ranks can provide teachers with the information and skills they need to successfully evaluate their students' learning results. This is evident in the inverse relationship between scholastic standing and the difficulty in identifying tasks appropriate for students' levels (AC-1.1).

Teachers with higher scholastic ranks are more likely to grasp their students' capabilities and constraints and can thus create tasks that are appropriate for their students. On the other hand, the higher degree of accountability and rigor that come with higher academic ranks can explain the positive link between academic rank and the use of time-consuming evaluation forms (AC-3.9).

Higher academic level teachers are expected to maintain a higher standard of assessment and evaluation, which may necessitate the use of more thorough and time-consuming assessment forms.

3.5 Implications of the Study to Teaching and Learning

The consequences of research studies for teaching and learning may be profound, since they assist educators in better understanding the elements that impact student accomplishment and making informed decisions regarding instructional approaches. Teachers can acquire insights into how students learn and how to improve their teaching techniques by reviewing the findings of research in many domains, such as psychology, neurology, and education. Using evidence-based tactics, customizing training to specific student requirements, and offering feedback that supports learning and growth are all examples of this. Finally, by remaining current on the newest research, educators may improve

their teaching approaches and assist their students in reaching their full potential.

3.5.1 Implication of respondents' profile to teaching and learning

The position of social science teachers in the Cordillera Administrative Region as to their respective profiles when put together affects how they teach and how their students learn. Teacher expertise is one of the most important factors that affect how well a student does in school [148]. Also, if teachers do not go to relevant trainings, it could hurt their professional development and make it harder for them to keep up with new teaching methods and educational tools. Also, lack of women in the education field may affect how well students do in school. Several studies have shown that having female teachers can help students, especially girls, do better in school [149,150]. However, the region's overrepresentation of female instructors may indicate a dearth of diversity in the teaching field, which may have an effect on the learning experiences of students from diverse backgrounds.

Furthermore, the absence of leadership opportunities for social science instructors in the Cordillera Administrative Region may have an effect on curriculum development and limit possibilities for innovation and improvement. Teacher leadership is critical for school growth because it allows for the creation of new methods of teaching and learning [151]. To handle these problems, more professional growth opportunities for teachers, especially in pedagogy and educational technology, may be required. In addition, attempts should be made to recruit and keep experienced teachers in the area, as well as provide more leadership opportunities for social science teachers to promote curriculum innovation and improvement. To guarantee that students receive a high-quality education, problems such as instructor expertise, professional growth opportunities, and leadership in the teaching field must be addressed.

3.5.2 Implication of instructional challenges experienced by social science teachers to teaching and learning

According to a study on the instructional challenges faced by social science teachers in the Cordillera Administrative Region, teachers face difficulties in evaluating and updating technological infrastructure, emphasizing the need for HEIs to provide the necessary technological infrastructure and support to

Table 5. Showing correlation coefficient between the demographic profile of respondents and their perceived assessment challenges

Linear (Profile & ACs)	Age	Gender	No. of Years in Service	Trainings Attended	Designation	Academic Rank
AC-1.1	-0.181	0.102	-0.253*	-0.126	-0.182	-0.264*
AC-1.2	-0.011	-0.101	-0.009	-0.123	0.022	0.032
AC-1.3	0.035	0.141	-0.015	-0.058	0.037	-0.078
AC-1.4	0.134	0.037	0.166	0.139	0.025	0.055
AC-2.5	-0.03	0.01	0.024	-0.065	0.059	0.031
AC-2.6	0.038	0.126	-0.006	0.037	0.000	0.071
AC-2.7	0.061	0.033	0.038	-0.163	-0.016	-0.003
AC-3.8	-0.043	-0.162	-0.005	-0.002	0.063	-0.039
AC-3.9	0.173	0.213	0.128	0.104	0.15	.243 [†]
AC-3.10	0.069	0.017	0.009	0.000	-0.034	-0.027
AC-3.11	-0.121	-0.003	-0.154	-0.052	-0.075	-0.117
AC-4.12	0.073	-0.216	0.067	0.201	-0.026	0.005
AC-4.13	-0.084	0.156	-0.066	-0.092	-0.169	-0.111
AC-4.14	-0.128	0.155	-0.086	-0.173	-0.029	-0.056
AC-4.15	-0.101	0.161	-0.070	-0.089	-0.054	-0.055

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

enable effective technology incorporation [152]. Furthermore, in order to use cutting-edge technology and flexible teaching approaches, instructors require suitable training and professional development opportunities [153,154]. Inclusive teaching strategies that address the requirements of a varied variety of students are also required, highlighting the need for creating an inclusive learning environment [155,156]. Furthermore, instructors must use adaptable teaching and learning approaches, which may incur extra expenditures, emphasizing the need for HEIs to invest in an adaptable learning environment that can enhance student participation, motivation, and success [157,158]. Addressing these concerns can result in a more responsive, inclusive, and successful teaching and learning environment that fulfills the needs of both students and society as a whole.

3.5.3 Implication of assessment challenges experienced by social science teachers to teaching and learning

The testing and evaluation problems that social science professors face in higher education institutions in the Cordillera Administrative Region can have a substantial influence on teaching and learning in the new normal. The study highlighted four primary kinds of assessment challenges: task preparation, assessment criteria development, performance task implementation, and performance task evaluation. Teachers need sufficient training and

assistance in organizing, carrying out, and assessing assessments in order to enhance their assessment abilities [159,160]. Furthermore, teachers must learn how to establish rubrics in order to effectively and fairly evaluate student learning. The study also emphasizes the need for suitable technical equipment and a conducive physical environment for job performance [161,162,163,164]. Furthermore, combating plagiarism necessitates appropriate tactics such as establishing academic ethical norms, fostering innovation, and giving students feedback to help them learn better [165,166]. Timely feedback is also required for proper assessment of student learning, which can be difficult in performance tasks [167,168]. Providing adequate time and resources to instructors can increase assessment quality, academic performance, and student learning outcomes.

3.5.4 Implication of the correlation between the demographic profile of respondents and their instructional challenges

This study emphasizes the link between the demographic features of instructors and instructional challenges, highlighting the significance of specific interventions to address these concerns. According to the study, elderly instructors may struggle to keep up with the newest technological advancements [169,170,171], while experienced teachers may require assistance managing their time [172,173,174]. There is a negative relationship

between title or academic rank and ICT difficulties [175], and instructors with dependable internet connections may have easier access to the Learning Management System (LMS) [176,177]. Professional development opportunities can assist instructors in better meeting the requirements of kids with special needs [178,179], and activities addressing gender bias are required to enable fair access to technology [180,181]. Teachers require continual guidance, resources, and chances for professional growth in order to provide a fair and effective learning environment.

3.5.5 Implication of the correlation between the demographic profile of respondents and their assessment challenges

Several variables, according to the research, impact instructors' capacity to pick suitable assignments for their pupils, including their experience, grade, evaluation processes, attitudes toward teaching and learning, and beliefs about teaching and learning [182]. Schools and organizations should provide opportunities for teachers at all academic levels to receive experience, support, resources, and training in various assessment techniques in order to help them improve their abilities. In order to increase student motivation and engagement, teachers should be encouraged to have a positive attitude about teaching and to offer clear, practical, and customized feedback [183]. To encourage the use of suitable activities in the classroom, it is vital to include teachers' ideas about teaching and learning when planning professional development programs [184].

4. CONCLUSION

In conclusion, the study provides valuable insights into the challenges faced by social science teachers in the Cordillera Administrative Region. While most teachers do not find it difficult to teach with the increasing demand for technology use, they require support in learning how to test and update technical infrastructure. Moreover, the study highlights the need to improve teacher training and development programs, establish an open learning atmosphere, and provide suitable technological tools and physical settings to support effective teaching and learning. Additionally, the study emphasizes the importance of adequate training and help with assessment planning, execution, and evaluation to enhance teachers' skills and understanding in this field. The findings of this study provide a useful guide for policymakers and education stakeholders to improve the

quality of education in the region and enhance the professional development of social science teachers.

CONSENT AND ETHICAL APPROVAL

The researchers were issued certification to proceed by the MMSU URERB and obtained an approval and consent form from the offices of the presidents of the various participating HEIs and the respondents themselves. The researchers provided a complete disclosure of all relevant information about the research in the form of a written document and explained its contents to the respondents. Respondents were provided sufficient time to complete the survey, and time-on-task and non-disruption of classes policies were observed during the study's implementation.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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