

## Attitude toward flexible learning of college students in Albay, Philippines

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### Article Info

#### Article history:

Received Mar 7, 2024

Revised Nov 2, 2024

Accepted Nov 8, 2024

#### Keywords:

Flexible learning  
Instructional delivery  
Learning experiences  
School readiness  
Student attitudes  
Teacher competence

### ABSTRACT

Instructional delivery was significantly disrupted by the COVID-19 pandemic worldwide, which led to a flexible modality of teaching-learning. This flexible learning modality challenged the readiness of schools and affected the students. This study determined college students' attitudes toward flexible learning during the COVID-19 pandemic in Albay Province, Philippines, using the explanatory sequential design of the mixed-methods approach. Data were gathered from 365 college students using an online survey, virtual focus group discussions, and informal interviews with 20 students. Salient findings showed that the students generally had favorable attitudes toward flexible learning, with favorable attitudes toward four dimensions: attitudes toward the teacher, learning resources, teaching methods and learning tasks, and technology tools, and neutral attitudes in two dimensions, namely, attitude toward assessment and support services. The students revealed favorable, neutral, unfavorable, and a combination of attitudes toward flexible learning as discerned from their experiences. The students' experiences indicate that inspiring and competent teachers are crucial figures in sustaining a favorable attitude of students toward flexible learning. This study provides insights into the gaps in implementing flexible learning through the students' perspectives, especially regarding the schools' readiness for and improvement of flexible learning in the post-COVID-19 pandemic.

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## 1. INTRODUCTION

The COVID-19 pandemic has drastically challenged the world. Different sectors worked on methods to find appropriate solutions for numerous problems. The pandemic was also inescapable for the education sector [1]. People doubted the possibility of learning during the pandemic, considering that schools and universities were shut down as a solution to their teachers' and students' safety [2]. According to research by Sintema [1], it is difficult to find literature on the relevance of COVID-19 to education during its rapid spread, mainly in medical studies. The research added that the education sector rarely anticipates the effects of a disease on effective educational delivery [1]. This pandemic made key stakeholders of education-the teachers, school managers, learners, parents, and the governments, experience constraints like never before. However, this challenge also opened doors to opportunities.

The education sector shifted its instruction from physical classrooms to online [2] and other modalities. With the COVID-19 crisis, there is a strong need to adapt to the risky situation and adopt

strategies to minimize the disruptions in education. Flexible learning is an alternative to conventional onsite learning modalities, which could not be allowed by the authorities or was impractical due to the continuing pandemic in many countries. Flexible learning refers to educational approaches and systems that provide learners with increased choice, convenience, and personalization to suit their needs [3]. In other words, flexible learning holistically addresses education in a pandemic. Flexible learning provides learners with options in their self-paced learning by utilizing different technologies that support the instructional process. In flexible learning, institutions and their students should continue strengthening their partnership to find and develop responsive and relevant ways and options that are economically viable and appropriately manageable for both stakeholders [4], [5].

With the COVID-19 crisis, innovative approaches in support of education have emerged, such as radio, television, take-home packages, and other forms of distance learning solutions [6]. These platforms, including the modified teaching-learning strategies, resources, content modularization, schedule arrangements, and school policies, provided inclusive and accessible learning opportunities in different modalities such as online, offline, and blended instructional delivery [6]–[8]. The use of these approaches underscores the mainstreaming of flexible learning during the pandemic. Literature has shown the benefits of flexible learning, like providing scaffolding to meet the needs of diverse students, enabling students to simultaneously attend to studies, work, and family, allowing students to develop competencies to adjust to change successfully [9], and facilitating more class time for interactions, collaborations and engagement with the lesson content [10]. Moreover, flexible learning is noted to support flexibility and independent learning of students. However, the effectiveness of flexible instruction delivery may vary in the school and teacher's implementation. Effective implementation of flexible learning requires an adequate course structure, active learning tasks, and teacher interaction by providing guidance and timely feedback on student progress and learning outcomes [11]. Nevertheless, the sudden implementation of the flexible learning modality may not be fully successful depending on the school, teachers, and learners' capabilities and practices, as they may not be prepared for the newly imposed instructional delivery.

The students, the clientele of the schools, are therefore confronted with new ways of attending learning sessions. The newness of their experiences under the new normal poses' challenges and opportunities worthy of inquiry. Hence, there is a strong need to study the students' attitudes toward flexible learning. Students' attitudes can be determined through feelings, behaviors, knowledge, and shared experiences [12], [13]. Studying their attitudes through experiences in flexible learning can help craft effective policies and guidelines for implementing the flexible learning modality type of instructional delivery during physical classroom restrictions.

Before the pandemic, schools and universities in the Philippines commonly conducted traditional learning delivery or learning in physical classrooms with information and communication technology (ICT) integration. Teachers and students were familiar with ICT integrated teaching and learning materials but online flexible learning is yet to be mainstreamed in schools. The online flexible learning modality was imposed as an alternative instructional delivery during the pandemic, particularly in public schools and universities in Albay, Philippines, where they switched to online flexible learning modalities. This modality was the first local implementation of flexible learning for college students. The Bicol University Open University, a state university in Albay, already utilized flexible learning modalities before the pandemic, but for graduate students [14], thus making flexible learning a new instructional approach for college students in most public community colleges and universities in the Bicol Region.

This paper mainly discusses college students' attitudes toward flexible learning in Albay Province, Philippines, during the COVID-19 pandemic. Specifically, this paper determined the students' attitudes toward the teachers, learning resources, teaching methods and learning tasks, technology tools, assessment, and support services and determined the different attitudes manifested in their experiences in flexible learning. The findings of this study provide pieces of evidence on the readiness of schools and universities in the implementation of flexible learning modality during the pandemic and can be used as a reference in creating policy reforms, flexible learning modality guidelines, class interventions, and strengthening support services for flexible learning.

## **2. METHOD**

### **2.1. Research design**

This study used the explanatory sequential design of the mixed-methods approach. In explanatory sequential design, quantitative data was initially gathered, followed by a qualitative data collection [15]. The initial data gathering method used the descriptive survey method through an online survey to determine the students' attitudes toward flexible learning with the teacher, learning resources, teaching methods and learning tasks, technology tools, assessment, and support services. This research design is appropriate

because descriptive research aims to describe a phenomenon and its characteristics. Studying the complex factors surrounding flexible learning experiences can be simplified through a descriptive research method. Students also experienced flexible learning differently based on their contexts. Thus, generalizing data may disregard problems at the individual and school levels [16], [17]. Online focus group discussions or informal interviews (for respondents who could not join the focus group discussions) followed the initial data gathering to substantiate the responses from the survey further and elicit the respondents' experiences on flexible learning during the pandemic. Qualitative data were interpreted using the phenomenological research method [17]. The phenomenological research was used to collect students' attitudes and lived experiences in flexible learning [17], [18]. Overall, this study collected data using appropriate tools for investigating a phenomenological case, including online surveys, focus group discussions, and informal interviews. These were used to describe an in-depth narration of their experiences [17], [19], [20]. The implications of this study are used to suggest modification or improvement in the implementation of flexible learning delivery in schools and universities.

## 2.2. Setting of the study and respondents

The setting of this study is in Albay Province, one of the six provinces of the Bicol Region in the Philippines. It is the regional center of Bicol, with one state university, six campuses, eight community colleges, and six major private higher education institutions in the province. However, this study only focused on determining the attitudes toward flexible learning of public college students in Albay, Philippines. Specifically, in selecting the respondents, purposive sampling was employed [21]. The criteria for selecting the target respondents include: i) a college student; ii) a resident of Albay; iii) officially enrolled in a public state university or community college during the pandemic; and iv) experienced flexible learning during the COVID-19 pandemic. Flexible learning falls under distance education, where the students are apart from their teachers at a distance, and the instructional delivery is done flexibly [22]. In this study, flexible learning refers to a form of distance education in which students were offered various learning modality options. Students may choose one or more learning modalities (e.g., synchronous sessions, asynchronous sessions, modular learning, or hybrid modality) depending on their circumstances, allowing a more student-centered distance education environment.

As shown in Table 1, the respondents consisted of 365 college students from the Albay Province who answered the online Google Form from April 12, 2021 to May 26, 2021 (1.5 months). Most respondents are 20 to 23 years old, female, and officially enrolled in a state university or college. The online survey questionnaire was posted on the researcher's and the research team's Facebook accounts and shared with prospective qualified respondents through Messenger during the stated duration. From among the respondents, 25 students were randomly chosen and sent an invitation via email for focus group discussions and informal interviews. A total of 20 of the 25 randomly selected students participated in the online focus group discussion or informal interviews via Zoom, either synchronously or asynchronously, depending on the interviewee's preference.

Table 1. Respondents of the study (n=365)

Profile of the respondents				
Category	Description	f	%	Total (%)
Age	19 years old and below	53	14.52	100
	20 to 23 years old	299	81.92	
	24 years old and above	13	3.56	
Gender	Male	84	23.01	100
	Female	281	76.99	
Public school/university	State universities/colleges (SUC)	227	62.19	100
	Community colleges	138	37.81	

## 2.3. Data gathering tools and data sources

The study used innovative digital strategies for data gathering. Before data collection, an informed consent form was provided to adhere to the Data Privacy Act of the Philippines and keep personal information confidential. The primary data-gathering technique was an online survey questionnaire using Google Forms. The focus group discussions were conducted virtually via Zoom conferencing, while the informal interviews were conducted using Zoom conferencing, Messenger, and Facebook. The informal interviews of the key informants were done either synchronously or asynchronously. The data-gathering tools utilized were the validated researcher-made online questionnaire and validated guide questions for the focus group discussion and informal interviews.

The online questionnaire on the student's attitude toward flexible learning and learners' experiences with flexible learning was designed and developed guided by previous research [23]. This questionnaire consisted of five-point scale items in six dimensions, which are: i) attitude toward the teacher; ii) attitude toward the learning resources; iii) attitude toward the teaching methods and learning tasks; iv) attitude toward technology tools; v) attitude toward assessment; and vi) attitude toward support services. Five teachers and researchers validated this tool, and a panel of three teachers conducted the walkthrough in the Google Form. Then, the questionnaire was pilot-tested on 30 students and updated before its administration to the respondents. The focus group discussions and interviews were done informally via Zoom, Messenger, and Facebook using the validated guide questions. The validators for the online questionnaire (five teachers and researchers) also validated the guide questions for the focus group discussions and informal interviews, which were done while validating the online questionnaire. The guide questions were validated by reviewing their alignment with the research objectives and their translation to Filipino and Bikol languages. The suggestions of the validators were incorporated into the revised tools, and the validators approved these revised tools before their use. The guide questions deal with the learners' experiences related to the different dimensions and attitudes toward flexible learning. Probing and follow-up questions were raised for clarification and elaboration of the responses. The interview was conducted using English, Filipino, and Bikol. Primary data sources in this study included the students' responses to the online survey questionnaire, the transcription of focus group discussions, and the interview responses.

#### **2.4. Analysis of data and statistical tools**

The statistical treatments used for the quantitative data from the survey were frequency count and weighted mean. The responses to the questionnaire were interpreted and guided by the following descriptions: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree. The qualitative data collected from the informal interviews and focus group discussions were transcribed and analyzed using manual coding of verbatim responses. This study combined both deductive and inductive approaches to coding [24]. The deductive manual coding was utilized for the data for research objectives on students' attitudes toward the teacher, learning resources, teaching methods and learning tasks, technology tools, assessments, and support services in flexible learning. Inductive manual coding was utilized for the research objective on students' experiences showing different attitudes toward flexible learning. Students' experiences or narratives were used to explain the findings from the quantitative data.

### **3. RESULTS AND DISCUSSION**

Attitude includes how people feel, think, behave, and maintain an expression of themselves within the environment [25]. According to Ajzen [26], attitudes can bi-directionally influence behavior. Concerning students, the consequences of their favorable or unfavorable experiences in flexible learning could affect their attitudes toward learning during the pandemic. Their attitudes toward flexible learning were manifested through their feelings, behavior, and knowledge as shared in their experiences [12], [13]. In this study, the attitude toward flexible learning is divided into six dimensions: attitude toward the teacher, attitude toward the learning resources, attitude toward the teaching methods and learning tasks, attitude toward technology tools, attitude toward assessment, and attitude toward support services. These dimensions will shed light on the experiences of college students and the readiness of schools and universities to implement flexible learning modalities during the pandemic. The students who participated in this study were from schools that deliver flexible learning instruction by providing learning options (e.g., online synchronous/asynchronous sessions, modular, or hybrid modalities) to the students. Students can decide their preferred schedule (pace), platforms (mode), and learning environments (place) [23], [27] upon consultations with their teachers.

The respondents are college students in Albay Province. They mostly used their phones rather than laptops to attend their synchronous and asynchronous classes and make their learning outputs. Phones were the commonly available device of students, revealing that they may not perform well academically as technology is a main driver for online flexible learning. They also preferred Google Meet and Messenger for synchronous classes, while Facebook and Google Classroom for asynchronous classes. Google and Facebook platforms are easy and accessible to use making it a convenient platform for learning. In a flexible learning environment, most students study in a common area at their homes, which means they do not have spaces for learning. The students also experienced unstable internet connection, power interruptions, and distractions while learning online. These learning conditions of the college students will be elaborated further in the discussion of students' experiences and attitudes toward flexible learning.

### 3.1. Attitude toward the teacher in flexible learning

As presented in Table 2, the students agree with all eight indicators for attitudes toward the teacher. The top three indicators include being satisfied with the teacher's knowledge of the topics (4.22), being motivated by the teachers' inspiring words (4.18), and liking the teachers' competence in using technology tools (4.12). These results show that satisfaction and motivation in content or disciplinary expertise, ability to inspire students, and skills in the use of technology are critical factors in the flexible learning modality for teachers to have. A student added that regarding the teachers' inspiring words:

*"I'm glad that some teachers are understanding and flexible, all throughout the online classes during the pandemic. I think it's going well, and I'm happy because of it."*

Another student said:

*"I highly appreciate the efforts put in by teachers,"*

which supports the results about liking the teachers' knowledge and technology expertise. However, a student disclosed:

*"It's unsatisfying when students and teachers lack digital skills, especially when the teacher blames his students because he didn't know how to use one learning platform. It is also frustrating when teachers say they understand us but still give activities with a lengthy article to read that cannot easily be accomplished."*

These responses imply that students' experiences with their teachers in flexible learning differ. Students felt that teachers affected how they viewed flexible learning during the pandemic. Therefore, the results suggest that students showed a favorable attitude toward an inspiring and competent teacher in flexible learning during the pandemic.

Other indicators that students agree with include disliking the teacher's reaching out to students (especially students who are unable to submit requirements on time or attend the synchronous sessions) (4.08), disliking the teacher's regular reminders (3.99), liking the teacher's dialogue or conversation with students beyond the regular schedule (3.98), and being satisfied with the interaction of the teacher with the learner (3.84). Although ranked last among the eight indicators, students still agree with the indicator that they are motivated by the teacher's attitude toward the learners (3.80). These specific findings mean that the students disliked regular reminders of their tasks from their teachers, liked teacher-and-student interactions, and somehow thought that teachers' attitudes toward them reciprocated their attitudes toward their teachers. Students might dislike regular reminders because as mentioned by one respondent:

*"It is sometimes disappointing that some professors still cannot understand and stretch their understanding towards the situation of the learners."*

Perhaps some students are encountering problems besides academic concerns and having difficulties meeting their academic requirements. Some students liked student-and-teacher interactions as one respondent said:

*"It's very much appreciated that the students and teachers do communicate with each other and that there is support at times."*

Another student added:

*"But there were also times (where) I feel motivated to comply with my requirements and participate because I have a constant support system consisting of my peers, family, and teachers. So, I can say flexible learning will certainly work if we maintain this constant support. If possible, reach out to students and listen to their concerns."*

Teachers communicating and supporting students, motivated students to continue learning despite the difficulties brought by the pandemic. How the teachers treat the students also plays a role in the latter's attitude towards the former as the facilitator of learning. A respondent's statement supports this finding:

*"My attitude depends on how our professor handles our class."*

Considerations offered by teachers show their treatment of their students in flexible learning. A student said:

*“Learning during the pandemic is stressful and draining; however, teachers who are providing extensive consideration make my learning better.”*

These findings imply that how teachers interact with their students also contributes to students' attitudes toward flexible learning during the pandemic. Overall, students showed favorable attitudes despite experiencing flexible learning with their teachers differently based on the results.

Table 2. Attitude of students toward their teachers in flexible learning

Indicators	w. $\bar{x}$	Interpretation
I am satisfied with the teacher's interaction with the learners.	3.84	Agree
I am motivated by the teacher's attitude toward the learners.	3.80	Agree
I dislike the teacher's regular reminders.	3.99	Agree
I am satisfied with the teacher's knowledge of the topics covered in the lessons.	4.22	Agree
I like the teacher's competence in the use of technology tools.	4.12	Agree
I like the teacher's dialogue or conversation with students beyond the regular schedule.	3.98	Agree
I am motivated by the teacher's inspiring words to the class.	4.18	Agree
I dislike the teacher's reaching out to students, especially those who are unable to submit requirements on time or attend the synchronous sessions.	4.08	Agree
Overall	4.03	Agree

Note: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree

In flexible learning, college students showed favorable attitudes to an inspiring teacher with confidence in his knowledge and technology expertise. Students are believed to learn actively and retain their lessons effectively when provided with teachers' support and an environment that will motivate them to learn [28]. This teacher's support can be attained through a teacher's sincere and inspiring words. Moreover, during the pandemic, teachers are expected to be equipped with technology expertise and appropriate pedagogical approaches to deliver content knowledge interactively to students [29]. Therefore, there should be continuing capacity-building of faculty in using technology for teaching and facilitating flexible learning. A competent teacher will adapt to the new teaching-learning modality and use his knowledge and technology expertise to improve learning experiences.

Teachers' interaction and treatment of students also affected students' attitudes toward flexible learning. Positively, the teacher's attitudes and behaviors could give students a mentally healthy perspective through good interactions [30]. According to Ekperi *et al.* [31], attitude is an essential indicator of behavior. Attitude determines how a teacher interacts with students and impacts their academic performance. In delivering instruction, the behavioral aspect of the learners should be considered, such as their attitudes towards the teacher and the lesson. How teachers educate, behave, and engage with students in or during instruction is more important than the instructional content [32]. Teachers' personalities have greater power and influence than course content or educational strategies employed in the classroom [33]. In brief, the teacher's knowledge and technology competence, behavior, attitudes, and personality traits influence the learners and their attitudes toward the teacher and flexible learning in general.

### 3.2. Attitude toward learning resources in flexible learning

Table 3 shows that students agree to seven of the eight indicators for attitude toward learning resources. Of the seven indicators, those with the top results pertain to liking materials because they are relevant to the lessons and the course (4.22), informative and up to date (3.98), and appropriate to the student's level (3.96). The results reveal that students preferred relevant, informative, recent, and developmentally appropriate learning resources for flexible learning.

Learning resources that lack information or are not developmentally appropriate for learners may cause either motivation or demotivation. This idea is revealed by a student who reported that:

*“I'm mostly not motivated to do activities, especially those that are quite difficult to do and understand.”*

In addition, another student stated that:

*“Whenever I don't understand the module, or there seems to be lacking information, I watch YouTube videos to make up for it.”*

If the learning resources for lessons, especially the new ones, are not developmentally appropriate, students may be tempted to stop doing the learning tasks or experience anxiety. Here is the narrative of one student:

*“I sometimes find myself spacing out in the middle of the day while doing my requirements, and I honestly find it hard to catch up with the lessons, especially those lessons that are new to me. This pandemic brought so much anxiety to my life as a whole, and it somehow affected my studies.”*

These findings reveal that students have unfavorable attitudes toward learning resources if it is not developmentally appropriate to their comprehension level and lack relevant and recent information to understand the learning materials. Therefore, teachers should provide more relevant, recent, and developmentally appropriate learning resources for students in the flexible learning modality.

Moreover, students agreed to the indicators: being satisfied with the materials' appropriateness for different target competencies (3.95), because learning resources are interactive (3.82), being motivated to read because they are easy to understand (3.75), and because materials are appealing (3.70). The alignment of learning competencies to the materials and the presentation of learning resources are also factors in developing students' favorable attitudes toward the learning resources for flexible learning. The teacher should mindfully select the type of learning resources as learning activities should be aligned to its objectives. A respondent showed his disappointment in not finding authentic learning in learning materials:

*“Frankly, I feel robbed somehow because during the first and currently in the second semester, there are subjects with so much potential that were compromised by the inability to address the flaws of flexible learning. There are things that cannot be taught through modules and learning tasks alone. And it's all the more difficult to overcome a misunderstanding/misconception about lessons because we cannot blame teachers for being unresponsive due to their personal affairs. Learning in this set-up has evolved into mere compliance because it is difficult to find efficient and inclusive ways to integrate authentic learning.”*

Regardless of the type of learning resource, a respondent shared that he tried to comply with the activities on time, and he stated:

*“I try to keep myself motivated to finish my activities even though the internet connection is unstable and there are frequent power interruptions. Although I sometimes feel unmotivated, I just think that I need to finish the activities on time.”*

These findings reveal that students think they attend school to comply with the learning tasks and not because they need to learn a topic for academic growth.

On one indicator, students were undecided whether disliking the materials due to their length and requiring laborious reading (3.27) affected their attitudes toward learning resources. This finding means that most students do not mind if they are given lengthy or laborious reading tasks in flexible learning modalities. However, their experiences show that having laborious academic tasks affected their attitude unfavorably towards flexible learning. Lengthy materials that need laborious reading can cause frustration among students, as revealed by a student who said:

*“It is also frustrating when teachers said they understand us but still give activities with a very lengthy article to read and cannot easily be accomplished.”*

Other students narrated that learning became tiring or challenging due to the learning resources and tasks, as shown by the feedback such as:

*“Sometimes when all the subjects are giving their activities at the same time, it's tiring and ... it was really hard for us to adjust on some tasks every week since we are loaded with lots of modules. I hope that we could go back to the face-to-face classes.”*

Another student said:

*“I struggle a lot most, especially with the learning resources.”*

Though students understand the need to use modules, they reported that using them ignites dislike. One student said:

*“I dislike the over-reliance on modules.”*

Students might not mind being given laborious academic tasks, but as shown in their experiences, they showed frustration, exhaustion, difficulty, and dislike of these types of learning resources as they consumed most of their time learning or doing the task for it, making less time for other academic tasks. Overall, learning resources should be considered to sustain students' favorable attitudes toward flexible learning.

Smidt *et al.* [34] supported this present study that learning resources should be updated with optional learning materials to support students' learning experiences adequately. Further, they found that distance education is not beneficial to students due to not understanding the materials, and the assessments can be easily passed due to the open resources students can refer to. Additionally, they also found that learning resources in flexible learning do not reflect the real-world scenario. This finding suggests that authentic learning should be emphasized in the flexible learning delivery and prevent students' "mere compliance" mentality. Teachers should select or design learning resources to benefit students' quality learning experiences.

Table 3. Attitude of students toward learning resources in flexible learning

Indicators	w. $\bar{x}$	Interpretation
I dislike the materials due to their length, which requires laborious reading.	3.27	Undecided
I am motivated to read the materials because they are clear and easy to understand.	3.75	Agree
I am satisfied with the materials since they are appropriate for the different target competencies.	3.95	Agree
I am motivated to use the materials because they are appealing.	3.70	Agree
I like the materials because they are highly informative and up-to-date.	3.98	Agree
I like the materials because they are interactive.	3.82	Agree
I am motivated to learn because the materials are appropriate to my level.	3.96	Agree
I like the materials because they are relevant to the lessons and the course.	4.22	Agree
Overall	3.83	Agree

Note: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree

Moreover, institutions should have validated the learning materials and instructional resources aligned with students' needs and preferences for flexible learning. Although different conditions can be factors in students' perceptions of online learning such as their home learning environment and technology tools available for learning, it is challenging to generalize students' perceptions since they are experiencing online learning uniquely [35]. In addition, some students had difficulty learning online because they lacked appropriate teacher support [36]. Teachers can provide motivational support to students by using interactive and engaging materials. Flexible learning develops responsibility for learning in students; however, different stakeholders should still work together because not all can be controlled by students in the flexible learning set-up [34].

### 3.3. Attitude toward teaching methods and learning tasks in flexible learning

It can be seen in Table 4 that students agree to eight out of the nine indicators for attitude toward teaching methods and learning tasks. The indicators with the top results are enjoying the learning tasks that focus on authentic learning (4.05), liking the interactive teaching methods (3.99), and being motivated to listen actively to engaging discussions (3.98). This finding suggests that students liked interactive, engaging, and authentic learning experiences for flexible learning. Moreover, students also agree with the following indicators to affect their attitude toward teaching methods and learning tasks: liking the variety of learning tasks (3.96), disliking when the teacher asks students to share their ideas or insights (3.80), being encouraged to join because the learning tasks are easy to accomplish but meaningful (3.79), being motivated to participate in active learning (3.79), and liking the teacher for the group activities or tasks (3.75).

Based on the results, differentiated individual or collaborative learning tasks and active classroom participation also affect students' attitudes toward teaching methods and learning tasks. Similar to the previous findings, engaging teaching methods and authentic learning tasks in flexible learning motivated students to learn during the pandemic. A student reported:

*“Somehow, I am motivated to study in flexible learning because it taught me to be more independent in studying because not all subjects are taught asynchronous(ly).”*

However, some expressed their unfavorable experiences concerning learning tasks. It was shared by a respondent that:

*“It is almost draining to the point that we sometimes or the students are not really learning. In my case, it is really difficult to catch up in all of the group and individual activities.”*



However, on one indicator, students were undecided if disliking monotonous presentations (2.76) affects their attitudes toward teaching methods and learning tasks. Perhaps college students find monotonous presentations a common teaching method for their age. Teachers should still prepare interesting and engaging presentations to sustain learners' attention and encourage a favorable attitude toward flexible learning. The students' preference for interactive presentations can partly be explained by their lack of social interactions and physical activities, which are possible in conventional face-to-face classes. None of the respondents shared their specific experiences with the monotonous presentations in their classes, but most respondents disclosed how stressful flexible learning is, particularly in delivering teaching methods and accomplishing learning tasks, due to different factors, including unstable internet connection, power interruptions, difficult collaborative tasks, and other distractions. One student remarked:

*"I think I was able to pull off good work (even if it's very stressful) during this online class."*

Other students stated:

*"Indeed, it's stressful, but the good part is we learn something new in synchronous and asynchronous types of learning."*

*"I appreciate how flexible learning gives us an opportunity to learn at our own pace. However, the new method frequently made me anxious due to things beyond my control, like our internet connection stability and power interruptions."*

One student explained the impact of flexible learning, explicitly mentioning the tasks or performances required, saying:

*"I am not satisfied nor enjoying this type of flexible learning during this pandemic as it has caused more stress, and there are times that the given and required tasks/performances are difficult to accomplish, especially when having group role plays or filming. It also has a negative impact on our health and well-being."*

Another student explained:

*"Adjusting to this new mode of learning has been hard for me. With everything that is happening in our country right now, it has been hard to focus. A new learning system is hard for me because I'm easily distracted by such things."*

With all of these stressful experiences, one respondent suggests improving the flexible learning delivery and support during the pandemic, saying:

*"I'm (enough) satisfied with what's happening now, but I hope the improvement of teaching and guiding students in today's flexible learning will not stop."*

The results imply that schools and teachers are not prepared regarding teaching methods and learning tasks during the sudden implementation of flexible learning during the pandemic. Overall, teaching methods and learning tasks contributed to students' attitudes toward flexible learning.

Students preferred engaging in differentiated individual or collaborative tasks. However, the lack of well-designed tasks was negatively perceived by students, who called it "busywork." Probably, their pending tasks piled up due to their negative perception of the given tasks and some class schedules coinciding with other task deadlines [34]. This kind of experience could be a reason most respondents shared unfavorable experiences regarding teaching methods and learning tasks because of the type, quality, and deadlines of the learning tasks. Teachers should consider diversity by creating properly designed learning tasks according to different student needs. If students perceive the teaching methods and learning tasks positively, they will be more accepting of the flexible learning modality [37]. Therefore, teachers must be mindful of their teaching methods and provide well-designed learning tasks. In selecting teaching methods and designing learning tasks, teachers should also be open to students' opinions to meet students' needs in the new teaching-learning modality. As mentioned in the results, students' conditions (e.g., unstable internet connection, power interruptions, distractions, and others) also affected their online learning participation. The extent of adaptation, suggestions, and improvements can be discussed with the students to maintain, modify, or reject the teaching-learning practices in flexible learning [38] to provide a more inclusive learning environment.

Table 4. Attitude of students toward teaching methods and learning tasks in flexible learning

Indicators	w. $\bar{x}$	Interpretation
I like the variety of learning tasks.	3.96	Agree
I am motivated to participate in active learning.	3.79	Agree
I like the learning tasks that focus on authentic learning.	4.05	Agree
I like the interactive teaching methods.	3.99	Agree
I dislike monotonous presentations.	2.76	Undecided
I am motivated to listen actively to engaging discussions.	3.98	Agree
I dislike it when the teacher asks students to share their ideas or insights.	3.80	Agree
I like the teacher for the group activities or tasks.	3.75	Agree
I am motivated to participate because the learning tasks are easy to accomplish but meaningful.	3.79	Agree
Overall	3.76	Agree

Note: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree

### 3.4. Attitude toward technology tools in flexible learning

As reflected in Table 5, students strongly agree to one indicator out of eight, which pertains to the teachers' responsiveness to the students' queries using varied tools (4.26). As previously mentioned, students disliked regular reminders of the tasks from their teachers. However, this section reveals that students agree to like the teachers' responsiveness when they have questions or concerns. On four indicators, students agree that liking the support provided by the teacher in using technology tools (3.89), being motivated by easy-to-use and navigate technology tools (3.85), selecting free and easily accessible technology tools used for flexible learning (3.67), and being motivated to study because of the teacher's regular post contribute to their attitudes toward technology tools (3.57). This finding reveals that students agree that using a convenient and user-friendly interface of technology tools and the teacher's regular posts affected their attitudes toward technology tools in flexible learning. However, a student disclosed:

*"There are many instructors who were not oriented properly on how to best utilize the technology available for the distance set-up."*

The results imply that teachers should know how to use technology tools to implement the flexible learning modality effectively.

On the other hand, students were undecided in three out of the eight indicators. These pertain to the use of technology tools resulting in reduced physical activities (2.77), the use of technology tools requiring expensive connectivity (2.92), and the use of technology tools being economical (3.33). These findings on the three indicators show that reduced physical interactions and costs of technology tools were not much considered by students to affect their attitudes toward technology tools in flexible learning. The use of technology tools depends on factors such as the type of device or gadget, internet connection, and power supply. Participants generally described their unfavorable experiences with the technology tools in the key informants' interviews. Almost all students reported being affected by the poor or intermittent internet connection and regular power interruption, describing their experiences as "unsatisfying," "not advantageous," "quite difficult," "stressful," "not good," or associate these experiences with "struggle," "dislike," "feeling drained," "loss of energy and motivation," and "making oneself anxious." Although the results show that reduced physical interaction was not a concern for students, their experiences reveal that they got physically exhausted from their online classes during the pandemic. One respondent said:

*"During the start of the school year, I was always ready to attend synchronous classes and was always early to pass requirements. But as the months passed by, I noticed that I was slowly losing energy and motivation towards this whole online class set-up. I was not myself for weeks because maybe I got burned out and just drained."*

Another student stated:

*"My online education experiences as a student (hasn't) really been good. This innovative educational structure has a number of advantages, including more flexibility to do homework at home, not having to get up too early to go to university, and safeguarding both staff and students. Despite these advantages, there are certain disadvantages to this learning process. When I'm doing schoolwork, I still find it difficult to stay motivated. When I'm surrounded by such temptations, such as my phone or other mobile devices, I lose all motivation to work."*

A respondent added:

*“I am enthusiastic at first, but after a few weeks, even though (I’m) continuously adjusting, (I) feel more drained than attending face-to-face classes. (I) became more prone to headaches (maybe due to long hours of using the laptop to do the requirements and reading the materials provided.”*

These experiences suggest that students still need physical activities to prevent overexposure to and exhaustion from online academic tasks. Working on many online tasks makes students more physically exhausted.

The teachers' technology expertise is necessary for flexible online learning, particularly when using digital presentations. Teachers can use technology tools to organize ideas and key points to present, making it easier for students to comprehend, thereby improving students' learning [39], [40]. In the present study, students show favorable attitudes toward easy-to-use and user-friendly interfaces of technology tools like Google Meet, Messenger, Google Classroom, and Facebook. This finding reveals that students with digital literacy are more optimistic about using technology tools for learning [41]. This finding suggests that convenient technology tools for teachers and students contribute to students' attitudes toward technology tools in flexible learning. Filipinos are active social media users worldwide, particularly on Facebook [42]. Filipino students and teachers were already familiar with the features of Facebook before the pandemic, making it a convenient platform for flexible learning. Other advantages of various technology tools for learning include online communication about school tasks and researching more information about the lessons helped enhance student learning [43]. The internet is also accessible to all students for more learning resources and prevents frustration from lacking provided physical resources [44]. However, students still experienced exhaustion even though they had access to the internet. They might not mind having reduced physical activity from flexible online learning tasks, but the type of their device (particularly phones), limited internet connection, and power interruptions are possible hindrances and stressors to students in flexible learning. The findings also imply that students should be given time to take breaks from using technology to prevent compromising their health.

Table 5. Attitude of students toward technology tools in flexible learning

Indicators	w. $\bar{x}$	Interpretation
I am motivated by the technology tools used because they are easy to use and navigate.	3.85	Agree
I am satisfied with flexible learning since it is economical.	3.33	Undecided
I dislike using technology tools for flexible learning since it requires expensive connectivity.	2.92	Undecided
I dislike relying on technology tools for flexible learning since it reduces physical activities.	2.77	Undecided
I like the support provided by the teacher in using the technology tools.	3.89	Agree
I like responsive teachers for students' queries using varied tools.	4.26	Strongly agree
I am motivated to study because of the teacher's regular posts.	3.57	Agree
I like the technology tools used for flexible learning because they are free and easily accessible.	3.67	Agree
Overall	3.53	Agree

Note: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree

### 3.5. Attitude toward assessment in flexible learning

Table 6 shows that students disagree with four of eleven indicators for attitude toward assessment. The indicator ranked lowest pertains to the assessment tasks not aligned with the lessons (2.01). Students disagreed with other indicators: disliked the highly theoretical tests and assessment tasks (2.08), disliked the laborious documentation of required performances (2.42), and were satisfied with the language level used in the test or assessment tasks (2.55). These specific findings mean that invalid assessments, standardized assessments, and demanding performance tasks did not affect their attitudes toward assessment in flexible learning, but find themselves unsatisfied with the complex language used in the assessments. The students agree to three indicators with the highest result on being satisfied with the extent or level of complexity or difficulty of the tests and assessment tasks (3.88). Students also agree that they are motivated by timely teacher feedback (3.55) and like the teacher's relevant and constructive feedback on the outputs submitted (3.44). This finding reveals that students might dislike complex language but still like the difficulty level of the given assessments and the constructive and timely feedback provided by the teacher. However, the students were undecided on four indicators such as being satisfied with the rubric or means of giving grades to the outputs or performances (3.34), being satisfied with the flexibility adopted for the test administration (3.20), disliking the tests and assessment tasks lifted from books or internet sources (3.20), and being satisfied with the length of the tests and other assessment tasks (2.82). Their satisfaction with the provided rubrics or criteria, flexible schedule, and length of test, as well as their dislike for ready-made assessment tasks sourced from books and the internet, were not considered much by students to affect their attitudes toward assessment in flexible learning.

In the students' interview, the respondents mentioned a lack of freedom and no opportunity to choose specific assessment tasks. One college student stated:

*Attitude toward flexible learning of college students in Albay, Philippines (Rebecca Rosario Oroña Bercasio)*

*“There is no such thing as options in assessments in college.”*

In addition, a student confessed:

*“I am afraid to tell them about the loaded task because I am afraid to have failing marks when they feel angry about it.”*

However, some students believe in freedom and flexibility in the assessment process. A student who believed in freedom in choosing assessment tasks and requirements said:

*“Sometimes, depending on what is instructed and the kind of circumstances I'm in.”*

Another college student said:

*“We are allowed to negotiate the schedule of assessments and deadlines of requirements but not the number and type of requirements. It is because the school also wants this standardized among sections of the same subjects.”*

One student said they were allowed to choose:

*“In terms of the type of requirements, but regarding the numbers, I think we are not allowed because it is required to submit all of the required tasks.”*

The respondents' flexible learning experiences regarding assessment reveal that freedom in assessment tasks and schedules depends on how they communicate with their teachers or how they want to present their learnings based on the given instruction.

Table 6. Attitude of students toward assessment in flexible learning

Indicators	w. $\bar{x}$	Interpretation
I am satisfied with the flexibility adopted for the test administration	3.20	Undecided
I dislike that the assessment tasks are not aligned with the lessons.	2.01	Disagree
I am satisfied with the length of the tests and other assessment tasks.	2.82	Undecided
I am motivated by the teacher's timely feedback.	3.55	Agree
I like the teacher's relevant and constructive feedback on the submitted outputs.	3.44	Agree
I dislike the highly theoretical tests and assessment tasks.	2.08	Disagree
I am satisfied with the extent or level of complexity or difficulty of the tests and assessment tasks.	3.88	Agree
I am satisfied with the level of language used in the test or assessment tasks.	2.55	Disagree
I dislike the laborious documentation of the required performances.	2.42	Disagree
I am satisfied with the rubric or means of giving grades to the outputs or performances.	3.34	Undecided
I dislike the tests and assessment tasks lifted from books or internet sources.	3.20	Undecided
Overall	2.95	Undecided

Note: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree

Students showed mixed attitudes regarding online learning expectations and experiences, from satisfaction to displeasure [45], similar to the present study. Flexibility in assessment is one of the difficulties in online assessments, including schedules, type of test, and platform for the assessment. Based on students' experiences, flexibility in assessments is only administered if teachers allow them. This finding means flexible learning assessment is experienced differently depending on the teacher. Despite having loaded tasks, students had to accept whatever assessment (valid or invalid assessments, easy or difficult) was given to them to prevent conflict with their teachers. However, assessment tasks in flexible learning should not be equivalent to a face-to-face class assessment [46], [47]. Students should be given more flexibility and time to digest their modules to prepare for the assessment. In this way, the students will be provided with more motivation and independent engagement in learning [48]. During the assessment process during the pandemic, students encountered limitations; thus, they should not be expected to learn the same scope and breadth of content as in non-crisis situations [46], [47]. The learning process and the assessment process should be flexible. Hence, giving some form of flexibility in the assessment during this flexible learning time is relevant and necessary. Flexibility in assessment can further motivate and engage students in the learning process by giving autonomy over their learning [48]. Moreover, continued feedback from the teachers should be provided to guide students about their academic progress based on their assessments and offer consultations with students to respond to their needs even in a flexible learning set-up [38], [49].

### 3.6. Attitude toward support services in flexible learning

Table 7 presents that students agree to five of the eight indicators for attitude towards support services while implementing flexible learning. The indicator with the top result pertains to being satisfied with the instructional support given by the teacher beyond the schedule of the virtual classes (4.02). Students also agree that being satisfied with the psycho-social support provided by the student organizations (3.98), being satisfied with the support provided in terms of cell card or internet load (3.71), being content with the instructional support given by the teacher during scheduled virtual classes (3.68), and being satisfied with the psycho-social support provided by the guidance counselor (3.65) contribute to their attitudes toward support services. These findings imply that students' satisfaction with the instructional support provided by the teacher during or beyond the official schedule, psycho-social support of student organizations and guidance counselors, and internet or mobile data allowance affected their attitudes toward support services in flexible learning modality. The students were undecided on two indicators about liking the support provided (to students, not necessarily oneself) in terms of devices or gadgets (3.19) and being satisfied with the psycho-social support offered by the teacher (3.06). This finding means that students are uncertain whether liking gadgets or device provision and teachers' psycho-social support affected their attitudes toward support services in flexible learning. Lastly, the students disagree with the indicator about disliking the extent of support the school library provides regarding accessible e-books and other references (1.85). This finding reveals that students' dislike of library digital services did not affect their attitudes toward support services in flexible learning.

Support services are essential to students during flexible learning to enhance their learning and motivate them to exert more effort. Listening to the students is necessary to help the teachers determine their needs and guide them in developing the appropriate intervention. Most students' responses would like to mainly suggest support services for students' mental health and academic assistance during the flexible learning implementation during the pandemic. A college student suggested:

*“Listen more actively to the students.”*

Teachers should make students feel important, especially when they feel hopeless in learning. Another college student added:

*“Let your students know that you are there for them and that if they need help, they will reach out to you. Let them know that you are in touch with counselors or mental health experts that can help them should they need to speak to someone.”*

During the COVID-19 crisis, students should also be given proper consideration as humans feel exhausted. Another suggestion from a student was:

*“The institution shall provide the basic needs of the students like the gadgets or loads. Also, the activities to be provided must be less than the usual activities that face-to-face classes have because not all students are fast learners, and not all students have the privilege to work on the tasks on time because of so many disturbances. We cannot anymore afford another year of online classes because our mental health is now at risk. If another year of online classes is done, I only suggest that the tasks must be flexible, too, and the professors should think that they are not the only professors. The activities shall also cover only the time allotted for every subject because some professors give plenty of activities every meeting; we need to exceed the class time, not just time but days, so we get exhausted from those activities.”*

Therefore, institutions and teachers should offer psycho-social and academic support services in flexible learning modalities.

Table 7. Attitude of students toward support services in flexible learning

Indicators	w. $\bar{x}$	Interpretation
I am satisfied with the support provided regarding cell card or internet load.	3.71	Agree
I like the support provided in terms of devices or gadgets.	3.19	Undecided
I am content with the instructional support given by the teacher during the scheduled virtual classes.	3.68	Agree
I am satisfied with the instructional support given by the teacher beyond the schedule of the virtual classes.	4.02	Agree
I dislike the extent of support the school library provides regarding accessible e-books and other references.	1.85	Disagree
I am satisfied with the psycho-social support provided by the teacher.	3.06	Undecided
I am satisfied with the psycho-social support provided by the guidance counselor.	3.65	Agree
I am satisfied with the psycho-social support provided by the students' organizations.	3.98	Agree
Overall	3.39	Undecided

Note: 1.0-1.80–strongly disagree, 1.81-2.60–disagree, 2.61-3.40–undecided, 3.41-4.20–agree, and 4.21-5.00–strongly agree

A successful implementation of flexible learning needs a relevant and appropriate support system for students. In the present study, students believe that psycho-social support and academic assistance contributed to their attitudes toward support services. Effective support and services are essential to maintain online learning quality, have accessible learning, and build a feeling of belongingness for students [23], [50], [51]. A possible reason behind students' uncertainty about their teachers' psycho-social support is that teachers did not ask about students' health [52]. Having no assurance teachers, made students develop insecurity. Some of these challenges and insecurities include meeting deadlines, doubting whether they could complete the assessments correctly, and fearing a delay in their studies [53]. It is, therefore, crucial to make relevant and timely support available to students because successful flexible learning can happen if both the students and the teacher are emotionally stable and mentally sound for teaching and learning. For students' difficulty in managing their mental health, having designated mental health experts to support students can help sort the entangled thoughts and emotions of students. At the same time, academic assistance in flexible learning may include improving the teaching-learning facilities (like the provision of well-functioning laptops and tablets to students) and the library system by being proactive in providing remote services (departmentalized access to an institutional learning management system).

As shown in Table 8, the students agree that the different indicators of their attitudes toward the teacher (4.03), the learning resources (3.83), the teaching methods and learning tasks (3.76), and the technology tools (3.53) affected their attitude favorably towards flexible learning as they agree with most of the positive indicators in these dimensions. The results show that students' attitudes toward their teachers gained the highest weighted mean from the respondents. This finding implies that teachers are crucial in evoking and sustaining favorable student attitudes during flexible learning. However, the students showed indecisiveness in whether their attitudes toward support services (3.39) and towards assessment (2.95) affected their attitudes toward flexible learning as they indicated neutral and unfavorable attitudes on most indicators of the two dimensions. These findings suggest that despite the sudden implementation of flexible learning, some indicators require modifications regarding the teachers, learning resources, teaching methods and learning tasks, and technology tools. However, some indicators require attention, particularly the assessment methods and support services offered in flexible learning. This finding calls for efforts to create policy reforms, flexible learning modality guidelines, and class interventions to implement the flexible learning modalities effectively. Moreover, it was also noted that based on the respondents' shared experiences, they showed different attitudes, favorable or unfavorable, on various indicators of the dimensions, but overall, the weighted mean is 3.58, meaning the students, in general, have a favorable attitude toward flexible learning implemented by their respective schools or universities and teachers.

Table 8. Students' attitudes toward flexible learning (n=365)

Dimensions	Number of indicators	w. $\bar{x}$	Interpretation
Attitude toward the teacher	8	4.03	Agree
Attitude toward the learning resources	8	3.83	Agree
Attitude toward the teaching methods and learning tasks	9	3.76	Agree
Attitude toward technology tools	8	3.53	Agree
Attitude toward assessment	11	2.95	Undecided
Attitude toward support services	8	3.39	Undecided
Grand overall	52	3.58	Agree

Note: 1.0-1.80-strongly disagree, 1.81-2.60-disagree, 2.61-3.40-undecided, 3.41-4.20-agree, and 4.21-5.00-strongly agree

The findings imply that the students who suddenly experienced flexible learning due to the pandemic still need to see and experience improved instructional delivery to foster a more favorable attitude towards the different dimensions of flexible learning. Relatedly, these findings imply that schools were somehow prepared for flexible learning but there is a necessity for school systems to assess the implementation of flexible learning and address the gaps identified so that it will be enhanced, evoking a more favorable attitude among the learners. Moreover, these findings imply the importance of the teachers, school, classmates, family, or significant others in providing essential support to the learners, whether in terms of logistics for technology tools, internet connection or device, or psycho-social support. Students' families are behind their learning and ability to attend flexible learning. In such cases, when the parents are focused on earning a living for the family or are financially struggling, the students may be faced with the dilemma of not having the finances for the internet connection or the device needed, as well as the presence of parents in times when students experience anxiety or demotivation. The pandemic disruptions pressed students to adapt to new educational methods, like virtual classrooms, instead of risking their safety in physical classrooms [45]. Platform accessibility issues, especially when students are not digitally literate,

made them encounter mixed feelings of fear, loneliness, and uncertainty about their significant activities, affecting their studies in the present and future [54]. Motivation, self-discipline, and independence are essential for learners in flexible learning. However, the students are mostly self-reliant, autonomous, and unsupervised; thus, studying their attitudes toward flexible learning is crucial in developing and implementing options for a pedagogically effective online curriculum [41], [44], [55].

### 3.7. Attitude toward flexible learning as shown through students' experiences

The students experienced flexible learning depending on their teachers' instructional delivery of flexible learning or the school's policies. On the different dimensions, Figure 1 shows that students have four types of attitudes toward flexible learning: favorable attitude, neutral attitude, unfavorable attitude, and a combination of favorable and unfavorable attitudes. Based on their experiences, the dimensions that greatly affected their attitude towards flexible learning include teachers, learning resources, teaching methods and learning tasks, and technology tools. The findings reveal that teacher competence, students' preference for relevant, informative, recent, and developmentally appropriate learning resources, active individual or collaborative learning tasks, convenient and easy-to-use technology tools, flexibility in assessment task presentation and schedules, and satisfaction in instructional and psycho-social support contribute favorably to their attitude toward flexible learning. The findings mean that there are aspects of flexible learning that positively impacted or motivated students to continue learning during the pandemic. However, students were uncertain whether assessment and support services contribute to their attitudes toward flexible learning in general. Students' unfavorable and combination of attitudes were mostly extracted from the interviews, where most were about physical and mental health and difficulty using technology that is either in their control (e.g., lack of digital skills) or beyond their control (e.g., power interruptions, unstable internet).

The students' experiences based on their narratives reveal that these attitudes are manifested through different components: their feelings (affective), the impact of an action (behavioral), and their knowledge and beliefs (cognitive) [12], [13]. The educational disruptions transferred physical classrooms to the virtual space. Students might feel and think differently about the sudden new ways (e.g., use of unfamiliar technology, set-up) and doubt their plans may fail due to the limitations of the pandemic [45], [54]. These are possible reasons students had unfavorable or mixed attitudes, as shown in their feelings (e.g., exhausted, frustrated, stressed), as they felt their future was far from being achieved. Thus, teachers should help assess students, identify their attitudes, and facilitate their learning by implementing a more effective strategy suitable to the different identified gaps in students' contexts and flexible learning implementation [35], [37], [48]. This can be done through modifications and enhancements by having policy reforms, teacher capacity-building, an effective flexible learning environment, class interventions and learning resource systems, an institutionalized learning management system, and a support system.

Favorable Attitudes and Experiences	Neutral Attitudes and Experiences	Unfavorable Attitudes and Experiences	A Combination of Attitudes
<ul style="list-style-type: none"> <li>• Teachers (inspiring and competent)</li> <li>• Learning resources (relevant, informative, recent, developmentally appropriate)</li> <li>• Teaching methods and learning tasks (interactive, engaging, authentic)</li> <li>• Technology tools (teacher responsiveness, convenient and user-friendly technology)</li> <li>• Appreciation of teachers</li> <li>• Understanding teachers</li> <li>• Motivation</li> <li>• Independent learning</li> <li>• Feedback</li> <li>• Psycho-social and academic support</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment</li> <li>• Support services</li> <li>• Teacher attitudes</li> <li>• Safety</li> <li>• Length of reading material or tests</li> <li>• Monotonous presentations</li> <li>• Reduced physical activities</li> <li>• Cost of technology tools</li> <li>• Rubrics</li> <li>• Assessment flexibility</li> <li>• Sources of assessment</li> <li>• Device or gadget provision for learning</li> <li>• Psycho-social support from teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Exhaustion</li> <li>• Frustration</li> <li>• Stressful</li> <li>• Draining</li> <li>• Anxious</li> <li>• Disappointment</li> <li>• Tiring</li> <li>• Burned out or drained</li> <li>• Power interruptions</li> <li>• Unstable Internet</li> <li>• Distractions</li> <li>• Lack digital skills</li> <li>• Mere compliance</li> <li>• Physical and mental health</li> </ul>	<ul style="list-style-type: none"> <li>• Enthusiastic then demotivated</li> <li>• Difficult but can find ways</li> <li>• Stressful but learning</li> <li>• Satisfied but needs improvement</li> <li>• Motivated then gradually losing energy</li> <li>• Advantages and disadvantages of flexible learning</li> </ul>

Figure 1. Themes of students' attitudes toward flexible learning

#### 4. CONCLUSION

The flexible learning of college students in Albay Province, Philippines, was the first of its kind due to the COVID-19 pandemic. Its newness to institutions, teachers, and learners provides an impetus for investigating students' attitudes toward flexible learning. This study aimed to determine the college students' attitudes toward flexible learning in Albay Province, Philippines, during the COVID-19 pandemic regarding attitudes toward the teachers, learning resources, teaching methods and learning tasks, technology tools, assessment, and support services. Based on the findings, the students generally had favorable attitudes toward flexible learning, with favorable attitudes toward four dimensions: attitudes toward the teacher, learning resources, teaching methods and learning tasks, and technology tools, and neutral attitudes in two dimensions, namely, attitude toward assessment and support services. The students revealed favorable, neutral, unfavorable, and a combination of attitudes toward flexible learning through their feelings, behavior, and knowledge as discerned from their experiences. The students' experiences reveal that inspiring and competent teachers are crucial figures in sustaining a favorable attitude of students toward flexible learning.

The current study provides insights into the gaps in implementing flexible learning through the students' perspectives. In particular, the study provides implications related to the schools' readiness for and improvement of flexible learning in the post-COVID-19 pandemic period in terms of policy reforms to address the mentioned causes of unfavorable attitudes towards flexible learning, specifically those under the control of the school, continuing capacity-building for teachers as facilitators in flexible learning to improve instructional practices, create learning environments to promote favorable attitudes, improvement of the class interventions and learning resource system to address neutral and unfavorable attitudes toward flexible learning and sustain students' favorable attitudes, the institutionalization of a learning management system, and enhancement of support system. In a sustainable post-pandemic era, this study enables a deeper understanding of the learners and their attitudes toward flexible learning and consequently opens pathways to future research undertakings on the different aspects of flexible learning, such as student engagement, students' performances, students' development of transversal skills through flexible learning, or interventions to address challenges related to flexible learning. Future researchers may also study student attitudes toward flexible learning or any of its specific aspects at different grade levels utilizing other research methodologies.

#### ACKNOWLEDGEMENTS

We acknowledge the funding provided by Bicol University through the Office of the Vice President for Research Development and Extension (AO 319-2021).

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