

Developing an Instrument for Assessing University Students' Engagement in Hybrid Learning

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ABSTRACT

Practices of online and hybrid teaching and learning remain ambiguous across universities. This situation has encouraged research focusing on the effectiveness of their implementation and the strategies used in conducting hybrid teaching and learning. Hybrid teaching and learning enable simultaneous instruction through both in-person and remote methods. Such flexibility introduces new opportunities for students and represents a novel educational approach for university courses. In response, universities have begun developing and implementing criteria for hybrid instruction. However, hybrid teaching and learning are in early stages; additional validated criteria are required. There are limited instruments available to assess these criteria and the factors necessary for effective hybrid teaching and learning. This paper aims to develop a robust instrument to evaluate current hybrid learning engagement in hybrid classrooms. The proposed instrument has been tested and validated across a set of 29 items. Reliability and validity were established. For the reliability test, the values of Cronbach's Alpha range from 0.84 to 0.94. For the validity test, factor analysis presents factor loadings ranging from 0.55 to 0.88. The instrument is ready for assessing students' engagement in terms of skills, emotion, participation, and performance. It provides opportunities for students and lecturers with guidance and direction towards high engagement.

Keywords:

Hybrid learning; Instrument; Engagement; Validity; Reliability

Introduction

Currently, online and hybrid teaching and learning practices are becoming increasingly popular. The practices may require more intentional observation during their implementation (Zhong & Rosli, 2025). Hybrid teaching and learning enable simultaneous instruction through both in-person and remote methods. Such flexibility introduces new opportunities for students and represents a novel educational approach for many university courses. In response, universities have begun developing and implementing criteria for hybrid instruction. However, given that hybrid teaching and learning are still in their early stages, additional validated criteria are required (Bond et al., 2020).

At present, there are limited instruments available to assess these criteria and the factors necessary for effective hybrid teaching and learning. More attention is needed to observe courses that specifically integrate current technology to create innovative, discipline-specific lessons that foster student engagement (Bond et al., 2020). Therefore, this paper aims to develop a robust instrument to evaluate current hybrid learning practices.

Problem Statement

To excel in a study, students need to commit actively, put in effort, and show a high degree of interest in the learning process. The degree of these responses needs to be captured during the learning process in courses, whether in or out of the classroom, as suggested by Handelsman (2005), who developed the Student Course Engagement Questionnaire (SCEQ).

The learning process significantly contributes to outcomes when learners and teachers collaborate actively and provide mutual feedback, thereby enhancing learner engagement. This focus is central to constructivist theories, which emphasise the active role of learners in constructing their understandings through interactions, sensing, and creating meaning from their experiences (Bruner, 1966; Piaget, 1970; Vygotsky, 1978). Therefore, there is a need to develop and validate an instrument that can effectively measure university students' engagement in hybrid learning environments. Such an instrument can provide meaningful insights into students' learning behaviour and help lecturers better understand how engagement occurs in hybrid courses.

In recent years, hybrid learning has become increasingly common in higher education institutions. This approach combines face-to-face and online learning, allowing students to participate in courses either in person in the classroom or remotely via digital platforms. While hybrid learning provides flexibility and new opportunities for teaching and learning, it also presents challenges for lecturers in understanding and monitoring students' level of engagement (Li et al., 2023; Mahmud et al., 2026; Teoh et al., 2025). This process can be challenging for students, too, as students must balance their attention between in-person and online formats, which can lead to disengagement, especially for remote students who may lose their sense of direction. Observing individual engagement in a hybrid classroom is becoming essential.

Student engagement is widely recognized as an important factor that influences learning effectiveness, academic motivation, and students' overall learning experience (Almusaed et al., 2023; Ochs et al., 2024). In hybrid learning environments, engagement becomes more complex because students interact with course materials, lecturers, and peers through both physical and virtual settings. As a result, it is more difficult for lecturers to observe and evaluate students' active participation in the learning process.

Although several instruments, such as the SCEQ (Handelsman, 2005), have been developed to measure student engagement in traditional classroom settings and online learning environments, relatively few tools specifically address engagement in hybrid learning contexts. Existing instruments may not fully capture the different dimensions of engagement that occur when learning takes place across both physical and digital environments. Without a suitable, validated instrument, it becomes difficult for researchers and educators to accurately assess students' engagement in hybrid courses accurately. Therefore, there is a need to develop and validate an instrument that can effectively measure university students' engagement in hybrid learning environments. Such an instrument can provide meaningful insights into students' learning behaviour and help lecturers better understand how engagement occurs in hybrid courses.

Research Objectives

The objectives of this study are:

1. To develop an instrument for assessing university students' engagement in hybrid learning environments.
2. To examine the reliability of the proposed instrument.
3. To evaluate the construct validity of the instrument through factor analysis.
4. To identify the dimensions of engagement reflected in the instrument, including skills, emotional, participation, and performance engagement.

Literature Review

Content validity is established through a literature review and comparison with previous studies, including Bergdahl, Nina et al. (2024), which is cited for reflecting the latest content and demonstrating contemporary engagement frameworks in assessing students' engagement. Grounded with a few essential aspects of engagement, Table 1 justifies the compatibility of Handelsman et al.'s (2005) instrument with Bergdahl et al.'s (2024) instrument. Although they use different terminology, they are conceptually aligned. The alignments are described in Table 1.

Table 1

Comparisons of engagement dimensions

Handelsman et al. (2005)	Bergdahl et al. (2024)	Conceptual Overlap
Performance Engagement	Cognitive Engagement	Performance engagement focuses on doing well with good grade in exam. Both focus cognition and emphasise towards excellent results.
Emotional Engagement	Emotional Engagement	Both focus interest, enjoyment, and affect toward learning
Participation Engagement	Behavioural + Social Engagement	Both focus interaction, involvement, participation in class activities, particularly showing responsibility as emphasised in behavioural engagement
Skills Engagement	Behavioural Engagement	Skills engagement operationalises learning strategies (like taking notes). Behavioural engagement focuses on striving through self-regulation for learning. Both emphasise holding appropriate learning strategies (through actions and behaviours) for completing tasks and achieving excellent outcomes.

The present study adopts the SCEQ's items (Handelsman, 2005). Although contemporary engagement frameworks distinguish cognitive, behavioural, emotional, and social dimensions, the SCEQ remains theoretically appropriate for course-level investigations. All hybrid learning practices aim to complete the teaching of courses in universities. The instrument introduced in this study operationalizes engagement through skills use, emotional reactions, participation behaviours, and performance-oriented effort within a specific instructional context. Rather than conceptualizing performance as an academic outcome, this study interprets performance engagement as intentional academic striving, aligning it with the behavioural investment of participating in activities. Therefore, the SCEQ (Handelsman, 2005) provides a context-sensitive, behaviourally grounded measure suitable for examining engagement within hybrid course environments. Modifications to SCEQ (Handelsman, 2005) are needed for different teaching environments. An example of the modification was the assessment of online classes (Nasir et al., 2020). Nevertheless, a more relevant instrument, based on the SCEQ (Handelsman, 2005) and other instruments for online classes, is required to provide educators with a clear picture of how students are currently being managed in a hybrid class.

Engagement in Hybrid Learning Environments

Hybrid learning requires students to be highly independent, as lecturers may be too burdened to provide sufficient support. They may need to take responsibility for demonstrating their engagement. To foster independence, students must commit to being highly engaged. The assessment of their engagement should be based on the following aspects.

This instrument was modified from SCEQ (Handelsman, 2005). Agreement or permission was received by email. The SCEQ quantifies engagement based on items across the behaviours, skills, participation, and performance domains. It is appropriate for assessing engagement in hybrid learning for the following specific reasons:

1. Skills engagement aims to gauge students' self-monitoring in learning:
Skills engagement reflects students' effort and commitment to organizing their learning through multiple strategies, such as taking notes and paying attention, which helps them effectively grasp the content. Note-taking significantly contributes to cognitive factors, as evidenced by Kiewra (1989). Hence, skills engagement is the

basis for students to participate in learning, giving them a chance to engage with good intention and emotion and to show performance.

2. Emotional engagement aims to gauge students' emotional state of learning:
Emotional engagement reflects students' enjoyment and interest, with a desire to use the materials and to communicate with lecturers and others in both physical and remote environments. More importantly, it examines students' sense of belonging in both environments and how this sense of belonging influences students' motivation in the learning process (Goodenow, 1993).
3. Participation engagement aims to gauge students' responses to the learning:
Participation reflects students' responses in both environments. These responses include raising a hand during questioning sessions, assisting peers, and other actions that demonstrate their commitment to learning. Students' involvement and participation in classroom activities demonstrate their responsibility for learning, active engagement, effort, and commitment, as they are amenable to environmental change (Fredricks et al., 2004).
4. Performance engagement aims to gauge students' clear understanding of their learning outcomes.
Performance reflects students' learning outcomes. In hybrid learning, students are adapting to changes in their learning environment. It is essential that hybrid learning always provide students with clear learning outcomes. Thus, they possess a strong sense of achievement in achieving the outcomes. The defined outcomes motivate students to remain resilient in their studies. This approach is crucial as students who perceive themselves as performing well in better coping with their academic challenges (Martin, 2013).

In hybrid learning environments, both in-person and online students are expected to take greater responsibility for their learning, particularly by maintaining attentive control throughout the learning process. Such environments encourage the development of self-regulated learning (SRL), in which attentive control is essential for sustaining focus and guiding learning activities. Students' awareness of the need to actively engage in their learning can be observed in several aspects: (1) through strategic learning behaviours reflected in their participation (Schnitzler et al., 2021); (2) through the use of learning skills and strategies; (3) through cognitive engagement (Schnitzler et al., 2021); and (4) through emotional engagement (Schnitzler et al., 2021). These aspects were integrated into the design of Handelsman's (2005) questionnaire, which covers the dimensions of participation engagement, skills engagement, cognitive engagement, and emotional engagement.

The Student Course Engagement Questionnaire (SCEQ) was designed for the teaching and learning processes in the face-to-face learning contexts. In this study, the instrument was modified to capture practices of hybrid classrooms, where learning occurs across both physical and virtual environments. Specifically, the modified instrument expands participation items to include online interactions (e.g., posting, responding, and engaging in discussions virtually), incorporates attentional and self-regulatory behaviours (Van der Rijst et al., 2023; Wang et al., 2023; Zimmerman, 2000), and includes instructor-related elements to capture teaching presence in blended environments online participation as a key dimension of engagement (Gagné, 1985; Garrison et al., 2001; Klimova & Kacetl, 2015). Therefore, the adapted instrument provides a more contextually valid measure of student engagement in hybrid learning settings.

Methods

The Hybrid Learning Instrument and Justifications

Hybrid learning and teaching provide students with opportunities to engage in both online and physical interactions. In hybrid learning, students need to take greater responsibility for themselves, as teachers have more tasks to fulfil across both physical and online platforms. Learners' efforts in learning have caught teachers' attention. The guide for ensuring students' effort is commonly observed through their behaviour, including their interactions, participation, willingness, and demonstrated communication skills (Bond et al., 2023). Their effortful behaviour is also dependent on emotion and on how they perceive the outcome or cognitions (Fredricks et al., 2004). Hence, the hybrid learning engagement instrument appropriately includes the four main dimensions as created by Handelsman et al. (2005).

On the other hand, opportunities to equip students with the necessary skills affect their behavioural engagement and trigger different emotions. Following these structures, modifications of the items are necessary to achieve better alignment. An Exploratory Factor Analysis (EFA) was conducted to explore the new latent structure. Handelsman et al.'s engagement instrument was adapted for constructing the hybrid teaching and learning engagement questionnaire. SPSS version 30 was selected to run the reliability and perform the factor analysis. In this process, permission to adapt the instrument was granted by the instrument's creator to the main author via email.

The items were modified by adding and discarding a few elements to better suit the specific justification bases from the teaching-learning activities conducted during classroom sessions. Table 2 shows the items added and discarded from the instrument. The original number of items is 23. After the adaptation, it has 29 items.

Table 2
Modification of The Items

Dimension	Number of original items	Number of items after deletion, modification and addition
Skills Engagement	9	7 (2 deleted; 2 modified)
Participation/Interaction Engagement	6	11 (5 added; 3 modified)
Emotional Engagement	5	8 (3 added; 1 modified)
Performance Engagement	3	3 (one modified)
Total	23	29

Three professors from three universities were invited to provide comments for the instrument. They were unaware of the identities of the other experts during the review process. Table 3 presents the refined items based on the experts' feedback. The modifications were made specifically to align with the hybrid lessons during classroom activities. In particular, the reasons for the modifications are listed in Table 3.

The first expert recommended adapting the questionnaire items to reflect the hybrid learning environment explicitly. The instrument has added an instruction: "In any hybrid learning activity, you might have personal experience adjusting to face-to-face learning while others participated virtually. Alternatively, the situation could be reversed. Therefore, in this study, kindly select your personal experience that you would be willing to share with the researchers. Please select one of the following choices (face-to-face or virtual) that you would be willing to share." The second expert commented on items 24, 25, and 26. Modifications were made in accordance with the comments. For example, for item 25, additional contexts of learning was suggested/added: "Responding to lecturers' questions" to "Responding to lecturers' questions during the lessons either virtually or in class." The third expert agreed with the instrument's adaptation. Only minor language changes were highlighted.

Table 3
Justification of The Modified Items

Dimension: Skills Engagement (final items)	Original Items	Justification
1 Making sure to study on a regular basis.	Making sure to study on a regular basis	No change.
2 Putting forth effort	Putting forth effort	No change.
3 Completing all the homework	Doing all the homework problems	The term "completing" emphasises task fulfilment and goal-directed behaviour, ensuring that the item captures students' persistence and responsibility in finishing assigned work rather than merely engaging in the activity.
4 Being organized	Being organized	No change.
5 Taking good notes in class.	Taking good notes in class.	No change.
6 Able to be attentive in class.	Listening carefully in class	In hybrid class, should focus more than just listening (behavioural) (Van der Rijst, 2023)
7 Coming to class every	Coming to class every day.	No change.

day		Staying up on the readings	The item “Staying up on the readings” was removed due to its limited applicability in hybrid learning environments, where instructional materials extend beyond traditional text-based readings to include multimedia and interactive resources. Retaining this item may not accurately reflect students’ engagement across diverse content formats.
		Looking over class notes between classes to make sure I understand the material	In a hybrid class, learning materials are often recording, slides, interactive platforms and videos. “Readings” are no longer the dominant mode of content delivery
Dimension: Emotional Engagement			
8	Finding ways to make the course material relevant to my life.	Finding ways to make the course material relevant to my life.	No change.
9	Applying the course material to my life	Applying course material to my life	No change.
10	Finding ways to make the course material interesting to me	Finding ways to make the course interesting to me.	No change.
11	Thinking about the content of discussion during class meetings	Thinking about the course between class meetings.	In hybrid learning, the focus is more on discussion.
12	Really desiring to learn the material	Really desiring to learn the material	No change.
13	Really desiring to listen to any discussion in class meeting.		The items “Really desiring to listen to any discussion in class meeting” and “Really desiring to listen to the instructor” were added to capture students’ intrinsic motivation and affective involvement in hybrid learning environments. Unlike traditional classrooms, hybrid settings may increase distractions and reduce immediate supervision, making students’ internal willingness to engage a critical component of emotional engagement (Deng et al., 2024; Ochs et al., 2024; Wang et al., 2023). These items reflect students’ genuine interest and desire to attend to instructional and peer interactions, thereby enhancing the measurement of emotional engagement.
14	Really desiring to listen to the instructor.		
15	Instructors provide opportunities or allow students to raise hand.		
Participation			
16	Raising my hand in class	Raising my hand in class.	No change.
17	Asking questions when I don’t understand the instructor.	Asking questions when I don’t understand the instructor.	No change.
18	Having fun in class	Having fun in class.	No change.
19	Participating actively in small group discussions	Participating actively in small-group discussions	No change.
20	Contact lecturer personally to review	Going to the professor’s office hours to	In hybrid class, personal contact is flexible. From location-specific

	assignments or tests or to ask questions	review assignments or tests or to ask questions.	interaction (office hours) to mode-flexible interaction (any personal contact) (Roig et al., 2025)
21	Helping my classmates to answer questions if they cannot answer.	Helping fellow students.	The participation within the group should be observed closely. It also involves interactions among the classmates, assisting each other.
22	Helping my classmates in other ways such as looking for relevant materials required, providing information, etc.		Other strategy used in the interaction.
23	Reading what others have posted in the discussion group.		In hybrid learning, interactions with peers are required by responding to peers and lecturers using the features of the platform (Kamaruddin, 2025; Zhang & Yu, 2023)
24	Posting my ideas during the lessons either virtually or in class.		
25	Responding to lecturers' questions during the lessons either virtually or in class.		Show responses to the lecturers.
26	Providing more ideas during discussions either virtually or in class.		Hybrid learning encourages discussion both in-person and remote.
Performance			
27	Getting a good grade.	Getting a good grade.	No change.
28	Doing the best with a lot of effort to get a good grade for any assigned task.	Doing well on the tests.	Highlighting more effort is required in hybrid learning to get a good grade of the study (Li et al., 2023).
29	Being confident that I can learn and do well in the class	Being confident that I can learn and do well in the class	No change.

Source of the Data

This study gathered data from undergraduates in public and private universities. A total of 111 undergraduates completed and returned the instrument. The sample of 111 is more than enough, as a minimum sample size of 100 is considered sufficient for conducting EFA (Hair et al., 2019). On the other hand, even though the ratio of participants from public universities was higher than that from private universities, there was no significant difference in the variances, indicating equal participation with $F = 0.0093$ and $p = 0.9234$. Hence, their participants' involvement is homogeneous and can proceed with the investigation of the studied variables, namely, engagement.

Results

An Exploratory Factor Analysis (EFA) was conducted to assess the validity of each dimension's content. The establishment ensures that the items are adapted to the hybrid learning environment, grounded in empirical data, for this purpose. The EF process includes the fulfilment of $KMO > 0.6$ and the significance of Bartlett's test. Particularly, the results (Table 3) indicated the suitability of the data for proceeding with factor analysis, as indicated by the Kaiser-Meyer-Olkin (KMO) value of 0.91. Besides, the items are strongly interrelated and can be grouped into dimensions, as indicated by Alpha's Sphericity $s-s\text{-value} < 0.05$. The result also confirms approximately 72% of the total variance. A Varimax rotation was used to clarify the items of each dimension. Loading scores for all items are also 0.50 or higher, indicating strong indicators for each dimension. The item is loaded strongly onto the four constructs. The instrument is ready for assessing students' engagement in terms of skills, emotion, participation, and performance. It

provides opportunities for students and lecturers, with guidance and direction towards high engagement. Lastly, Cronbach's reliability of each factor was ensured to be greater than 0.7. Cronbach's alpha ranges from 0.84 to 0.94 (see Table 3).

Table 3

Results of The Reliability Test and Factor Analysis for Construct Validity

Dimension	Item		Cronbach's Alpha	Loading
Skills Engagement	1-7	Commit, effort, homework, organised, notes, attention, attendance	0.88	0.62-0.81
Emotional Engagement	8-15	Relevant, application, interesting, content discussion, desire material, desire discussion, desire instructor, desire opportunity	0.94	0.58-0.79
Participation Engagement	16-26	Raise hand, questioning, fun, participating, consult, help answer, help material, understand, idea lesson, respond, idea discuss	0.93	0.55-0.84
Performance Engagement	27-29	Good grade, doing best, confident	0.84	0.76-0.88
Overall			0.97	

Discussions

The results show that the items are valid and reliable. The minimum loading of 0.55 demonstrates the acceptable validity, while the minimum Cronbach's Alpha of 0.84 indicates internal reliability of the constructs. The moderately high loading indicates that the items could be trusted to assess what is supposed to be observed. The items are internally reliable and emerged with acceptable Cronbach's alpha value to be 0.84, indicating that the items reliably reflect the content presentation's internal consistency. Three professors validated the meaning or overall contents of the items measuring the dimensions for the instrument, which justified the content validity.

The research has validated that the dimensions of engagement consist of skills engagement, emotional engagement, participation, and performance. These findings are consistent with the engagement framework established by Handelsman (2005), as well as other pertinent scholarly literature. These dimensions have emerged as significant factors within hybrid learning environments, particularly regarding the assessment of engagement through the integration of online, artificial intelligence, and multimedia technologies, which facilitate enhanced learning outcomes by fostering engagement, enjoyment, and cognitive development.

The instrument is also useful for closely assessing and observing cultural practices as presented in the items. Culturally, educators particularly emphasise the importance of students' presence in class (Fabian et al., 2024). Mostly, educators like to arrange for students who are facing constraints to be present with the availability of hybrid learning. The facilities for conducting hybrid learning must also consider participation, as it involves more than just attendance (Bergdahl et al., 2024). Therefore, a valid measure of participation is required. This participation is also related to engagement skills, as students who participate apply skills such as paying attention, organising themselves, and putting in effort. The practices and responses contribute to inner participation by showing their desire for learning. The statistical grouping (Factors) matches the theoretical grouping (Dimensions) almost perfectly. The instrument is designed to assess engagement in hybrid learning. The construction of this instrument provides opportunities for

educators to determine students' engagement. It reduces educators' challenges in monitoring their engagement (Li et al., 2023; Mahmud et al., 2026; Teoh et al., 2025).

The valid and reliable engagement questionnaire provides lecturers with an easy way to gauge students' engagement. In particular, the results may be needed to predict other aspects, such as students' achievement (Appleton, 2008). The results support the use of the instrument developed by Handelsman (2005) for engagement in a hybrid classroom. This enhances and enriches researchers' understanding of how to conduct hybrid learning effectively. More tools are needed because the growing trend of hybrid learning requires more feedback, leading to new ways to engage students that encourage creativity, backed by new technology (Bond et al., 2020). The focus is primarily on psychological factors and other related aspects (Reschly & Christenson, 2012). Cognition needs to be balanced, as learning to achieve understanding is highly dependent on emotion (Pekrun, 2006). Hence, the cognitive aspect, as named in this instrument's skill engagement, also focuses on self-regulation in sustaining effort over a long learning journey.

Performance engagement is referred to as cognitive engagement because current educational engagement needs to be more specific and focus on achievement. Performance and competency are related to cognitive ability because cognitive flexibility in manipulating knowledge and translating it into learning performance and competency, particularly through thinking and problem-solving skills, is required of learners. The engagement instrument for hybrid learning was constructed in alignment with the learning context and core dimensions of engagement. The validity testing results indicate that the instrument (presented in the appendix) is suitable for assessing student engagement in hybrid learning environments.

The implementation of learner-centred engagement has become increasingly essential within technological contexts, rendering the student-centred learning environment a critical priority. It is vital to provide an environment that enables learners to engage effectively, receive necessary support, encourage peer and instructor collaboration, and promote the development of skills, learning strategies, self-regulation and cognitive performance. The developed instrument, called as Engagement Hybrid Learning Instrument possesses the requisite capability to measure these emerging aspects of engagement as explained in the study.

Conclusion

This study successfully established an instrument to gauge students' engagement in hybrid learning. Across the four dimensions (performance engagement, emotional engagement, participation engagement, and skills engagement), the reliabilities were determined to be between 0.84 and 0.94, with factor loadings of validity ranged between 0.55 and 0.88. The instrument is ready to provide input about overall engagement in a hybrid class, in addition to giving input for performance engagement, emotional engagement, participation engagement, and skill engagement. This instrument highly benchmarks and adapts the existing engagement instrument (Handelsman et al., 2005), which is specifically used for a physical classroom. Future research can further explore the current needs or new environments that may require additional modifications and improvements. Hence, future research can focus on exploring some relevant technological or environmental factors (of various hybrid settings) that frequently evolve in the current digital world.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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Appendix

The scales used: 1: Not all characteristic of me; 2: Not really characteristic of me; 3: moderately characteristic of me; 4: characteristic of me; 5: Very characteristic of me

Dimension: Skills Engagement	
1	Making sure to study on a regular basis.
2	Putting forth effort
3	Completing all the homework
4	Being organized
5	Taking good notes in class.
6	Able to be attentive in class.
7	Coming to class every day
Dimension: Emotional Engagement	
8	Finding ways to make the course material relevant to my life.
9	Applying the course material to my life
10	Finding ways to make the course material interesting to me
11	Thinking about the content of discussion during class meetings
12	Really desiring to learn the Material
13	Really desiring to listen to any discussion in class meeting.
14	Really desiring to listen to the instructor.
15	Instructors provide opportunities or allow students to raise hand.
Participation	
16	Raising my hand in class
17	Asking questions when I don't understand the instructor.
18	Having fun in class
19	Participating actively in small group discussions
20	Contact lecturer personally to review assignments or tests or to ask questions
21	Helping my classmates to answer questions if they cannot answer.
22	Helping my classmates in other ways such as looking for relevant materials required, providing information, etc.

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| 23 | Reading what others have posted in the discussion group. |
| 24 | Posting my ideas during the lessons either virtually or in class. |
| 25 | Responding to lecturers' questions during the lessons either virtually or in class. |
| 26 | Providing more ideas during discussions either virtually or in class. |
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Performance

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| 27 | Getting a good grade. |
| 28 | Doing the best with a lot of effort to get a good grade for any assigned task. |
| 29 | Being confident that I can learn and do well in the class |
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