

Overseeing Limited In-Person Classes in Medical Technology: Reference to a Post-Pandemic Supervisory Plan

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ABSTRACT

The advent of Coronavirus 19 infection and its effects on higher education has been the focus of concern in the efforts for learning continuity. To create a school environment that adheres to continuously changing guidelines and is ready for contingencies, the school administrators and policymakers were expected to develop leadership goals and implement innovative strategies. A total of 202 respondents purposively selected from 6 schools, representing the groups of students, instructors, and school administrators, participated to share their assessments and insights about the conduct of limited in-person classes in the BS Medical Technology program. Key areas regarded for evaluation include the Policies, Health Protocols, Facility Controls, and Instructions and Performance Tasks. The leadership approaches employed by the school administrators in the conduct of limited in-person classes were evaluated in the areas of Crisis Management, Communication and Consultation, and Compliance and Implementation. There were no significant differences across the groups in their assessment of the leadership approaches. However, in the key areas of Policies and Health Protocols, the groups differed. The best practices in the conduct of limited in-person classes common across the 3 groups include: observing the minimum public health standards, answering daily health checklists or contact tracing, wearing personal protective equipment, and active implementation of protocols and guidelines. A supervisory plan was recommended based on the empirical indicators and best practices to ensure the safe and quality conduct of limited in-person classes.

Keywords: Limited in-person classes, Medical Technology, post-pandemic, leadership approaches, health protocols

INTRODUCTION

The challenge of ensuring public health and safety in the resumption of face-to-face classes is a tough dilemma faced by school heads and policymakers. The reopening of in-person classes must be carefully planned to ensure the safety of the stakeholders, especially the students and teachers, and be conducted in a controlled fashion, especially in following the minimum health standards [1]. The delivery of instructions and the accomplishment of learning competencies in such a modified environment should be balanced with safeguarding the health risks [2]. With the advent of blended learning, the quality of our educational systems becomes a real challenge, especially in the areas of curricula, instructional methodologies, and educational technology [3]. The management role is vital to sustaining a successful educational system that achieves its strategic objectives. The Commission on Higher Education did not instigate the suspension of classes but a continued adjustment for flexible online learning, the alternative modes of learning deemed the safest and most appropriate pedagogical approach in teaching during the pandemic [2]. However, there is a need to take into consideration the laboratory competencies and performance tasks of various courses wherein hands-on experience is necessary [4]. With this, a gradual and safe scheme for the reopening of campuses for in-person classes had to be organized.

CHED-DOH JMC No. 2021-004 is a revision of JMC No. 2021-001. This was the basis for schools in their preparations of the facilities and guidelines to obtain CHED approval to conduct limited in-person classes. With the adoption of the alert levels, CHED revised its guidelines in which majority of the requirements have been simplified and consolidated [5]. The DOH Guidelines on the Nationwide Implementation of an

Alert Levels System for COVID Response allowed the conduct of limited face-to-face classes for higher education in areas under Alert Level Systems 1, 2, and 3. Higher Education Institutions (HEIs) no longer need to apply for certification or approval, rather, the memo emphasized a self-checklist system requiring HEIs to evaluate their facilities if it is at par with the standards set [5].

As the schools transition from online to limited face-to-face classes, guidelines have been directed towards the attainment of the most essential competencies compressed in a short duration of time or a shifting cycle [6], particularly in the implementation of allied health programs and practicums. The focus is on the protocols and guidelines required by CHED to ensure that acceptable standards of education and the required infrastructures are maintained. In this restricting state of health emergency, the quality of education is very volatile as schools are struggling to deal with the transition from the traditional to online and back to a Limited face-to-face setting. How are schools to conduct Limited face-to-face classes, especially when there is no precedence? Education must prevail only because of the management approach that our leaders adopt, guided by how they foresee the system may cope. The concept of melding management, response, quality, and continuity must be set in a concrete standard that is comprehensive and empirical to be well understood and implemented.

This study takes on the impact of the current educational state of in-person classes and considers a timely and comprehensive discussion to help school leaders in the preparation, management, and conduct of limited face-to-face classes, and the development of a quality system, especially for the allied health courses. The researcher hoped to provide a framework for quality management by overseeing limited in-person classes in Medical Technology as a reference to a post-pandemic supervisory plan.

A. Conceptual Framework

This study explored the conduct of limited face-to-face classes in Medical Technology in the areas of Policies, Health protocols, Facility controls, and Instructions and Performance tasks (Figure 1). The leadership approaches of school heads in terms of Crisis Management, Communication and Consultation, and Compliance and Implementation, are explored on how they shape and control the various survey areas. The students, instructors, and school heads assess these areas, including the leadership approaches, and share the best practices in the implementation of in-person classes in their schools. The various perspectives are evaluated to come up with a supervisory plan with the realization of a quality framework in education management, for the development of contingency plans amidst a crisis, and learning continuity. These assessments initiate the necessary adjustments in the way the school heads implement quality management and the ability to cope with the challenges.

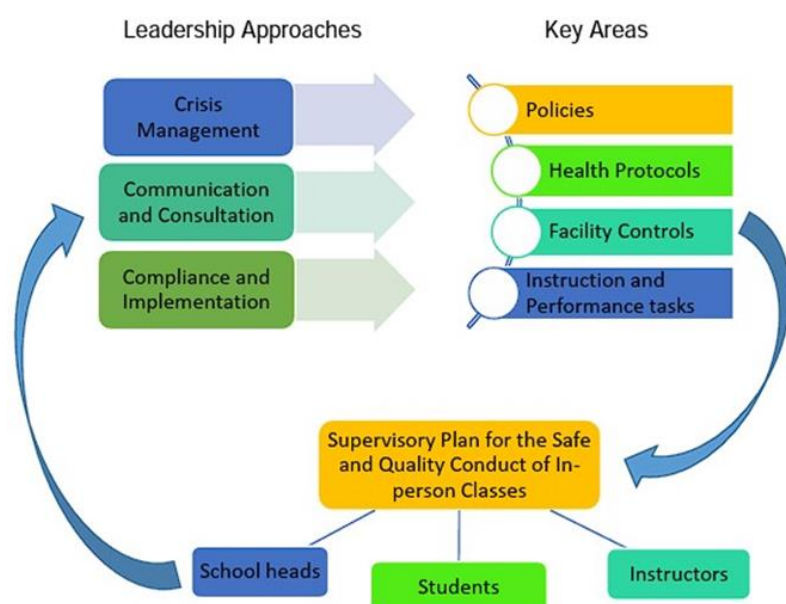


Figure 1. Conceptual Framework

METHODOLOGY

A. Research Design

A descriptive research design with the use of quantitative and qualitative data was utilized to explore the conduct and management oversight of Medical Technology in-person classes. A qualitative design was employed in gathering the data regarding the best practices, and a structured and measurable design for the evaluation of the leadership approaches of the school heads and the conduct of in-person classes. A Likert scale was observed as a system of ascribing quantitative value to qualitative information. The electronic survey and interviews were conducted from Aug 20 to Sept 15, 2022.

B. Research Locale

The study was conducted among the students, administrators, and instructors in various private Higher Education Institutions in Metro Manila and Rizal province, Philippines. These schools were among the first to be granted permission by the Commission on Higher Education to conduct limited face-to-face classes since 2021.

C. Respondents of the Study

A total of 202 respondents to the study comprised the 3 groups: school administrators, instructors, and students. These were the main participants and beneficiaries of the limited face-to-face instructions. The respondents were purposively chosen from six (6) schools pursuing the implementation of limited face-to-face classes in the BS Medical Technology program. The sample size included thirteen (13) school administrators, nineteen (19) instructors, and one hundred and seventy (170) students. The school administrators, instructors, and students were conveniently identified by their interest in taking part in the study.

D. Research Instrument and Data Gathering

A researcher-made survey questionnaire formatted in a Google form was utilized. A letter overview explains the attributes and objectives of the study which was followed by securing the permission of the respondents. The personal information did not require the respondent's name but included the year level for students, work experience and educational attainment of the administrators and instructors, email, school affiliation, number of terms spent in limited in-person classes, sex, and age.

Two sets of researcher-made survey instruments were used as data-gathering tools. The first research instrument is a survey for the school administrators and instructors, and the second is for the students. The survey tool consisted of two parts. Part 1 Likert-type questions that survey the key areas relevant to the conduct of in-person classes and the leadership approaches. A four-point Likert scale was designed to measure the responses. Part 2 of the survey questionnaire contains an open-ended question that asks about the best practices in the conduct of limited in-person classes in Medical Technology and a follow-up on handling big classes and multiple sections.

E. Validity and Reliability of Instrument

Content validation was a necessity since the survey instrument was researcher-made. The instrument was reviewed by 3 experts: a) the dean, b) the program chair, and c) the clinical coordinator in Medical Technology, all participating in limited face-to-face classes. The online approach was used wherein the content validation form was sent to the experts and clear instructions were provided. The recommended score of the Survey Content Validity Index (S-CVI) to have excellent content validity should reach ≥ 0.90 and for good content validity 0.70 to 0.80. This study had an excellent S-CVI average of 1.0 in all domains.

The validated tool was then subjected to pilot testing among 10 individuals not included in the final survey. Cronbach's alpha is a statistical tool to assess the internal consistency of a set of scales which is a measure of

reliability of the instrument. An alpha coefficient of at least 0.70 is good and acceptable. The computed alpha coefficient of the instrument used was excellent at 0.91.

F. Treatment of Data

The assessment of the student, instructor, and school administrator of the conduct of the limited in-person classes in the key areas of the Policies, Health protocols, Facility controls, and Instructions and performance tasks, with responses following the 4-point Likert rating and the leadership approaches employed by the school heads in the conduct of limited in-person classes was tabulated and computed for the Mean.

The comparison of the assessment of the respondents of the conduct of the limited in-person classes and the leadership approaches employed by the school heads was made with the Analysis of Variance (ANOVA) in the 3 groups.

G. Ethical Considerations

Ethical considerations were given due importance for the protection of life, health, privacy, and dignity of participants throughout the study. The information given and the identity of the respondents were protected. Anonymity was ensured by not requiring the names of the participants on the survey questionnaires. Furthermore, the school affiliation was not stated in the survey and the virtual interviews. The researcher did not seek approval from any institution because the study was designed and conducted to present only these institutions' profiles rather than their names. However, due permission and consent were secured from the respondents for the electronically conducted survey and the virtual interviews. With this, a permit from the Ethics Review Board was not necessary. The results and data gathered were used only for the purposes of this specific research.

RESULTS AND DISCUSSION

The 202 respondents included 13 school administrators, 19 instructors, and 170 students (Table I). The respondents were chosen purposively from the 6 schools that pursued limited face-to-face classes in the BS Medical Technology program in 2021 and permitted the surveys.

TABLE I. RESPONDENTS FROM SCHOOLS

School	School Administrators	Instructors	Students	Total
School A	1	3	16	20
School B	2	4	28	34
School C	2	2	13	17
School D	3	3	75	81
School E	3	4	17	24
School F	2	3	21	26
Total	13	19	170	202

A. The Assessment of Respondents on the Conduct of the Limited In-Person Classes

The summary assessment of the groups of school heads, instructors, and students of the conduct of in-person classes based on key areas of Policies (3.33), Health Protocols (3.34), Facility Controls (3.31), and Instructions and Performance tasks (3.33) are presented in Table II. The overall rating was Excellent (3.32) across the 3 groups. This is a good indication that the 6 schools have planned and implemented well the guidelines and protocols for in-person classes in their respective institutions.

The groups of respondents evaluated the conduct of the limited in-person classes in terms of Policies, Health protocols, Facility controls, Instructions, and performance tasks. Several indicators were considered in the

survey for each of these items. The indicators considered in terms of Policies include: 1. There is a policy on the minimum public health standards; 2. Admission, exclusion, and waiver policies are in order; 3. Guidelines on class size and crowd control are observed; 4. Instructional modality policies are in place; 5. Student Services are active and following certain guidelines; 6. Presence of a Learning Continuity plan; 7. Guidelines on Waste management are strictly followed; and 8. Disinfection and cleaning measures are well observed.

Indicators considered in the Health Protocol include: 1. Contact tracing protocols are established; 2. There are screening and detection guidelines; 3. Presence of an Emergency response, isolation, and surveillance protocols; 4. A referral system, lockdown, and contingency plan are drafted; 5. The appropriate use of PPE is enforced; and 6. Physical distancing is maintained.

The indicators considered in Facility Control include: 1. Adequate signages are placed on strategic and conspicuous areas; 2. Presence of handwashing facilities and sanitation products; 3. An isolation room is provided; 4. Efficient ventilation and air exchange in rooms and facilities; 5. There is a foot traffic system; and 6. There is a triage area at the entry points.

TABLE II. SUMMARY OF MEAN SCORES ON THE CONDUCT OF LIMITED IN-PERSON CLASSES

Items Considered	Students n=170			Instructors n=19			School Administrators n=13			Overall		
	Mean	Std. Dev.	Verbal Int.	Mean	Std. Dev.	Verbal Int.	Mean	Std. Dev.	Verbal Int.	Mean	Std. Dev.	Verbal Int.
Policies	3.39	.540	E	3.07	.337	VS	3.00	.228	VS	3.33	.691	E
Health Protocols	3.38	.552	E	3.13	.371	VS	3.04	.206	VS	3.34	.531	E
Facility Controls	3.33	.547	E	3.22	.397	VS	3.14	.234	VS	3.31	.521	E
Instructions and Performance Tasks	3.36	.567	E	3.22	.313	VS	3.03	.071	VS	3.33	.536	E
Grand Mean	3.36	.714	E	3.17	.636	VS	3.06	.363	VS	3.32	.481	E

Legend: 3.26-4.00 = Excellent (E); 2.51-3.25 = Very Satisfactory (VS); 1.76-2.50 Satisfactory (S); 1.00-1.75 = Needs Improvement (NI)

For the Instructions and Performance task, the following indicators were considered: 1. The most essential competencies are identified; 2. Learning outcomes per test or method are achieved; 3. Proficiency and skills in laboratory methods are developed; 4. Lectures complement the performance tasks; 5. Lab activities enhanced the theoretical knowledge; 6. Learning Modules are updated and provided; 7. Experiments and school activities are performed safely; 8. Immediate and constant assessments are made; and 9. There is a Catch-up plan and a Learning Continuity plan.

Among the indicators, the Guidelines on class size and crowd control received a consistent VS rating, which is the lowest. A reflection of the difficulty in facilitating the classes with throngs of students while maintaining physical distancing. Downsizing the class size has been suggested to reduce the incidence of infections, as they resumed face-to-face classes in 2020 during the intra-pandemic [7]. The classroom layout is important. Rather than reducing the class size some classrooms were created from bigger yet non-traditional areas to accommodate the students and meet the proper spacing [8]. In the adoption of safety and mitigation standards, some researchers asserted that the seating capacities of rooms should be reduced [9]. DOH-CHED Joint Memorandum circular 2021-004 encouraged cyclical shifting and the downsizing of the number of students in a class to lessen the chances of infection by observing the minimum spacing [5].

Policies are essential in the conduct of in-person classes and the implementation of safety measures in schools. Administrators should work on creating policies and procedures to ensure safety and support systems, and the implementation of health protocols [10], [11]. Major policy changes in the school's implementation of standard operating procedures are required to cope with an uptick in cases [12]. Adaptable policies and dynamism are preferred for attending sessions on-site [4], and the DOH-CHED Joint Memorandum circular 2021-004 outlined the necessary policies to be implemented in schools in the conduct of limited face-to-face classes [5].

The conduct of in-person classes in the key area of Health Protocols was rated Excellent (3.34). Among the criteria in Health protocols, it was unanimous in all the 3 groups that Physical distancing (2.93) is an indicator that can still be made better. One of the challenges for didactic teaching was the limited classroom space permitting for physically distanced teaching [13]. Another challenge is the entrance of schools as numerous students cause a bottleneck at the entry point and a long queue, the "One Entry, One Exit" policy for students and employees [5]. To hasten an orderly entry without accumulating a long queue and physical distancing is maintained, an ID-swipe system was adopted in the university.

Another indicator that may still be improved is the Referral system, lockdown, and contingency plan (3.21). It was recommended that schools establish a "response team" to make immediate decisions, referrals, and lockdown, and contingency plans in conducting in-person classes. The response team is essential in coordinating directives from the health and education department with the university health team [14]. The education management of medical courses, developing action plans for the maintenance of the most essential activities, and the contingency measures for cases should be balanced for the in-person classes to work [15]. The importance of proper planning and risk assessments of the course offerings cannot be stressed enough [16].

Across groups, the Facility Controls were rated by Students as Excellent (3.33), VS (3.14) by the instructors, and VS (3.31) by the School Heads. An overall VS on 3 criteria was noted in the area of Facilities which may provide an avenue for improvements: the isolation room, an efficient ventilation and air exchange in rooms and facilities, and a foot traffic system. These are the basic installations and retrofitting that the schools must provide to ensure safety in the conduct of in-person classes. To support school reopening, the administration should come up with guidelines structured around protective measures related to facility ventilation, and procedures and facilities for isolation of all people with symptoms [2]. The DOH-CHED Joint Memorandum circular # 4- Engineering and facility controls require a standby set-up of a single-person isolation room inside the campus to temporarily hold an individual who will develop COVID-19 symptoms and a foot traffic system [5].

The assessment of the groups for Instructions and Performance Tasks was Excellent (3.33). The criteria have been rated Excellent in all indicators, except for Learning outcomes per test or method (3.24), and a Catch-up plan and Learning Continuity plan (3.21). Learning outcomes are measurable and concrete goals that students are expected to learn in a subject. At a given limited time in a cyclical shift, these outcomes are to be achieved. Practice and mastery are forced as a shortened exposure time in school is preferable. Moreover, challenges encountered include a reduction in clinical lab experience and patient contact hours in medical training [13].

A Catch-up plan was drafted to help absentees in limited face-to-face classes, and a Learning Continuity plan was written to anticipate the ways to pursue the teaching and learning process in the event of a lockdown and long-term disruptions. The importance and role of technology and virtualization in filling the gaps in ensuring educational continuity in medical education have been elaborated [17]. Various online tools and digital interventions were presented, and a comparison was made, including videoconferencing, pre-recorded materials, and social media platforms. After digital classes were introduced abruptly, the significance of coming up with concrete measures for learning continuity and mitigating disruptions in education should not be overlooked [18].

B. Assessment of Leadership Approaches Employed by the School Heads

The summary of the assessment of the groups of school administrators, instructors, and students of the Leadership Approaches employed by School Heads was presented in Table III. The Leadership Approaches were evaluated by the groups and rated Excellent on Crisis Management (3.30), Communication and Consultation (3.26), and Compliance and Implementation (3.35).

In Crisis Management, school heads were expected to effectively decide on the concerns at hand and quickly respond. The changing and developing conditions require a swift and dynamic effort on the part of the administration if we are to move forward [15]. A school's pandemic response team for vital decisions and emerging concerns may consist of the Dean or Vice Dean, the education directors of various departments, and educational administrative units. The response team must decide on issues and measures to avoid the peak periods of disease transmissions, including the escalation of cases or case clustering [14]. The DOH-CHED JMC (2021) which is the main source of Philippine school guidelines requires the establishment of a Crisis Management Committee in every school. The major functions of the CMC include the evaluation of the readiness of programs to reopen for limited face-to-face classes, disseminating appropriate and relevant information to the stakeholders, overseeing the implementation of health and safety protocols, and taking the appropriate measures when risks and impacts of COVID-19 may exist in the campus or surrounding communities [5].

The assessment of the groups of respondents on the Leadership approaches concerning Communication and Consultation was Excellent (3.26). However, across groups, several indicators were rated VS: Convene the committee to resolve issues (3.23), Delegation of specific areas of concern (3.24), Take into consideration the plight of the faculty and students (3.25), and give importance to the feedback of the stakeholders (3.23). The groups may not be aware of the committee activities concerning the enumerated indicators but rely only on the direct manifestation observable on their level.

The assessment of the groups concerning Compliance and Implementation was Excellent (3.35). Each indicator was rated Excellent, except for Accomplishing a Weekly Health Report (3.20). The weekly report submitted to CHEDRO reflects the number of students, faculty, and non-teaching personnel attending face-to-face classes, including the number of suspected, probable, and confirmed cases [5]. This measure ensures the compliance and implementation of the health protocols. The instrument is also a record to determine an escalation in cases and case clustering. School heads should adopt a system to address health issues and intensify the monitoring and risk assessment [1].

C. Comparison of the Assessment of Respondents on the Conduct of the Limited In-Person Classes

The Analysis of Variance was used to compare across 3 groups based on an arbitrary significance level of 0.05 in Table IV. The assessment of the student, instructor, and school administrator respondents on the conduct of the limited in-person classes was found to be significantly different in the key areas of Policies (p: 0.003) and Health Protocols (p: 0.016). However, in the areas of Facility Controls (p: 0.358) and Instructions and Performance Tasks (p: 0.067) the groups do not vary significantly in their evaluations. As the DOH-CHED Joint Memorandum circular 2021-004 outlined the necessary policies and health protocols to be implemented in schools [5], major policy changes and variations in the school's implementation of the standard operating procedures may have been adopted to cope with the increasing cases [12]. School Heads may have preferred adaptable policies and dynamism for overseeing classes on-site [4].

D. Comparison of the Assessment of Respondents on the Leadership Approaches Employed by the School Heads

The Analysis of Variance was used to compare across 3 groups based on an arbitrary significance level of 0.05. Table V shows the assessment of the student, instructor, and school administrator respondents on the Leadership Approaches employed by School Heads was not significantly different in the key indicators of Crisis Management (p: 0.067), Communication, and Consultation (p: 0.149), and Compliance and

Implementation (p: 0.096). Despite variations in how the policies and protocols may be implemented for the safe and effective conduct of limited in-person classes, the School Heads were similar in their view of the Leadership Approach being guided greatly by the DOH-CHED JMC 2021 guidelines.

TABLE III. SUMMARY OF MEAN SCORES OF THE LEADERSHIP APPROACHES EMPLOYED BY SCHOOL HEADS

Items Considered	Students n=170			Instructors n=19			School Administrators n=13			Overall		
	Mean	Std. Dev.	Verbal Int.	Mean	Std. Dev.	Verbal Int.	Mean	Std. Dev.	Verbal Int.	Mean	Std. Dev.	Verbal Int.
Crisis Management	3.34	.652	E	3.19	.390	VS	2.95	.197	VS	3.30	.630	E
Communication and Consultation	3.30	.655	E	3.14	.389	VS	2.99	.144	VS	3.26	.619	E
Compliance and Implementation	3.38	.591	E	3.32	.537	VS	3.03	.303	VS	3.35	.577	E
Grand Mean	3.34	.713	E	3.22	.543	VS	2.99	.327	VS	3.31	.588	E

Legend: 3.26-4.00 = Excellent (E); 2.51-3.25 = Very Satisfactory (VS); 1.76-2.50 Satisfactory (S); 1.00-1.75 = Needs Improvement (NI)

TABLE IV. COMPARISON OF THE ASSESSMENT OF RESPONDENTS ON THE CONDUCT OF LIMITED IN-PERSON CLASSES

Items Considered	Respondents	Mean (\bar{x})	Std. Dev.(s)	F-value	Decision on Ho	Sig. p-value	Interpretation
Policies	Students (n=170)	3.39	.539	6.128	Reject Ho	.003	Significant
	Instructors (n=19)	3.07	.336				
	Sch. Admin. (n=13)	3.00	.228				
Health Protocols	Students (n=170)	3.38	.552	4.197	Reject Ho	.016	Significant
	Instructors (n=19)	3.13	.371				
	Sch. Admin. (n=13)	3.04	.206				
Facility Controls	Students (n=170)	3.33	.547	1.032	Failed to reject Ho*	.358	Not Significant
	Instructors (n=19)	3.22	.397				
	Sch. Admin. (n=13)	3.14	.234				
Instructions and Performance Tasks	Students (n=170)	3.36	.567	2.741	Failed to reject Ho*	.067	Not Significant
	Instructors (n=19)	3.22	.313				
	Sch. Admin. (n=13)	3.03	.070				

TABLE V. COMPARISON OF THE ASSESSMENT OF THE RESPONDENTS ON THE LEADERSHIP APPROACHES EMPLOYED BY SCHOOL HEADS

Items Considered	Respondents	Mean (\bar{x})	Std. Dev (s)	F-value	Decision on Ho	Sig. p-value	Interpretation
Crisis Management	Students (n=170)	3.34	.652	2.735	Failed to reject Ho	.067	Not Significant
	Instructors (n=19)	3.19	.542				
	Sch. Admin. (n=13)	2.95	.197				
Communication and Consultation	Students (n=170)	3.30	.655	1.923	Failed to reject Ho	.149	Not Significant
	Instructors (n=19)	3.14	.390				
	Sch. Admin. (n=13)	2.99	.144				
Compliance and Implementation	Students (n=170)	3.38	.591	2.370	Failed to reject Ho	.096	Not Significant
	Instructors (n=19)	3.32	.537				
	Sch. Admin. (n=13)	3.03	.303				

TABLE VI. BEST PRACTICES IN THE CONDUCT OF LIMITED IN-PERSON CLASSES IN MEDICAL TECHNOLOGY

Theme	Significant Statements
1. Best Practices in the Conduct of Limited In-Person Classes in Medical Technology	“More areas were put up to be used that would allow physical distancing, students queueing properly, and encouraging the students in having health insurance.” (Student 2)
	“Lectures were conducted online and only the laboratories were given face-to-face time for safer implementation.” (Student 7)
	“There is a doffing and donning area to change the PPE, exams in classes are done electronically, and adopting a seat plan.” (Instructor 6)
	“Implementation of monitoring, testing for the symptomatic, and surveillance to prevent the spread of infections.” (School Administrator 1)
	“A supply of face masks and handwashing materials were made available, including the presence of air-purifiers in rooms.” (School Administrator 2)
2. Management of In-person classes in multiple sections and big classes	“Cyclical shifting, and class schedule which is flexible, depending on the alert level.” (Instructor 3)
	“Small grouping and proper shifting of sections following a bubble-concept to restrict contacts; and contact tracing protocol.” (School administrator 4)
	“Rooms and facilities were maximized in use, and only specific classrooms or laboratories were designated.” (Student 10)

E. The Best Practices in the Conduct of Limited In-person Classes

The best practice in the conduct of limited in-person classes common across the 3 groups is “Observing the minimum public health standards” which includes wearing of mask, hand hygiene, and physical distancing. The majority of Students consider “Answering daily health checklist or contact tracing”, and “Wearing of Personal protective equipment” as the best practices. The “Implementation of protocols” is noteworthy according to the group of Instructors. School administrators stressed the “Active implementation of

guidelines” as a major factor in limited face-to-face classes. Some significant statements in the 2 themes are presented in Table VI.

The responses coming from the 3 groups reflected the important points in the management and implementation of in-person classes. Safety measures need to be in place such as filling out COVID-19 safety checklists, temperature and symptom screening, and maintaining a 1.5 meters safe distance [20]. Students, employees, and faculty to honestly complete the Online Health Declaration form before coming to class [4]. Protective measures related to hand hygiene, physical distancing, and the use of masks are essential to safely manage the resumption of classes [2]. Updating and diligent implementation of the protocols and guidelines by the school’s administration is a must. Moreover, in the conduct of in-person classes, administrators may work on creating sound policies and procedures to ensure that a support system is in place [16].

F. Recommended Supervisory Plan for a Safe and Effective Limited Face-to-face Instruction

This supervisory plan (Table VII) was crafted to achieve the following general objectives: 1. Deliver effective and quality limited face-to-face instruction in a safe learning environment to students; and 2. Strengthen the school-community health and safety support system for all stakeholders. This supervisory plan was based on the indicators excellently assessed in the Leadership Approaches that include key areas in Health and Safety Protocols, Policies, Stakeholders, Facilities, Disinfection and Sanitation, Curriculum and Instruction, Learning Continuity, and Contingency.

The key areas and items are based on the survey instrument used in the study as these have proven to be valid and rated excellently by the respondents across the three groups. The Strategies column is the suggested undertakings to implement the Specific Objectives in the Key areas. The Mode of Supervision specifies the type of management oversight required in the key areas. This can be in the form of administrative, supportive, or clinical supervision. The Expected Outcomes are achievable results set against the Activities. Instead of an assessment column, the Expected Outcomes is a more straightforward way of setting the standards for the achievement of goals above what is simply passable. The percentage of the Expected Outcomes represents the realistic and measurable achievable level.

TABLE VII. SUPERVISORY PLAN

Crisis Management				
Key Area	Strategies	Objectives	Mode of Supervision	Expected Outcomes
Crisis Management Committee	Mobilizing the school medical team Establishing procedure for detection, quarantine and referral of confirmed cases Case updating and coordination Setting up proactive COVID-19 local hotline/help desk Convene the committee	To ensure implementation of the schools’ health and safety protocols Dynamic and aggressive approach in developing case concerns To monitor case escalation and clustering To easily coordinate with referral hospitals and testing facilities To resolve developing issues	Administrative	The physician and safety officer monitored the health and safety protocols (>95%) Quick response to symptomatic cases by isolation, consultation and referral (>90%) Manage and decide on case characteristics to prevent the spread of infection (>95%) Well-coordinated referral and testing (>90%) Issues are resolved and decisions are made on vital concerns (>95%)

Policies	Review of the supervision and guidelines Monitoring and Surveillance	To keep updated with the amendments, requirements, and adequacy of policies Oversee the implementation, monitoring, and compliance of the policies	Administrative	Updated and effective guidelines meeting the minimum public health standards of physical distancing, masking, and hand washing (100%) The minimum public health standards is properly observed by personnel and students (>95%)
Contingency Plan	Crafting contingency plan to be followed in case of COVID-19 resurgence	To guide the response and action of all participants in dealing with cases	Supportive	Orderly and systematic response to incidents and cases (>95%)
Health and Safety Protocols	Evaluation and adequacy of the Health and safety protocols Evaluating the established mechanisms inside the classroom Establishing contact tracing tools and temperature check for school goers	To be able to meet the minimum public health standards To ensure zero to minimal risk of COVID 19 transmission of the learners To secure timely health declaration for school personnel and students	Administrative	The minimum public health standards is properly observed by personnel and students (>95%) Classrooms are safe with physical distancing, proper ventilation, seat plan and schedule of disinfection (100%) School personnel and learners follow strictly the checking of temperature and contact tracing (100%)
Learning Continuity	Developing strategies for the continuity of learning	To pursue learning through online learning modalities in case of school lockdown	Clinical	Learners seamlessly continue their learning through online modalities during lockdown (>95%)
Communication and Consultation				
Key Area	Strategies	Objectives	Mode of Supervision	Expected Outcomes
Stakeholders	Orientation of the Stakeholders Securing a written consent from parents and students Developing communication plans Mobilizing resources and support from community stakeholders	To inform and educate the stakeholders of the implementation of face-to-face classes To determine the participants approval and willingness to take part in face-to-face classes To create database of contact details of students and schedule of activities To secure support and resources to encourage and equip face-to-face classes	Supportive	The protocols implemented during face-to-face learning were properly maintained and observed (>95%) The parents and students willingly support and participate in face-to-face classes (>95%) In case of emergency, the school has a database of contact details available (>90%) There would be sufficient materials/equipment needed for the opening of classes (>90%)

Government agencies	Coordination with the LGU, DOH and CHED Updating with new CMOs and community health guidelines	To secure the support and permission of the various government agencies To guide the school and administrators in the implementation of face-to-face classes	Supportive	Approval to conduct face-to-face classes because of an established safe facility and presence of proper guidelines (100%) Best practices are observed and revised protocols are followed (>90%)
Compliance and Implementation				
Key Area	Strategies	Objectives	Mode of Supervision	Expected Outcomes
Facilities	Walk through the retrofitting and installation Setting up clear and easy-to-understand signage Establishing safe entrance and exit Providing temperature thermal scanner	To check the readiness of the facility for in-person classes To strengthen observance of health protocol To screen symptomatic and those at risk To check the body temperature upon entering the school premises	Administrative	A school that is retrofitted and ready for the conduct of in-person classes (>90%) Students and personnel are guided on their way throughout the school and they are reminded of the safety requirements (>95%) Triage protocols are in place, and a safe environment is maintained (>95%) Only students and personnel who are afebrile are allowed to enter school (>95%)
Instructions and Performance Tasks	Designing class programs for limited face-to-face modality Identify the most essential learning competencies Implementing Self-Learning Module activity sheets	To ensure the safety of students participating in limited face-to-face classes To facilitate learning while focusing on the important competencies when in school To lessen student interaction during class hours	Clinical	The cyclical shifting is set, seat plan is observed, modality is planned, and students are well guided (>95%) Students have a clear direction on what to accomplish in school (>95%) Students work independently and safely at home on theoretical tasks (>95%)
Disinfection and sanitation	Scheduling sanitation and disinfection Setting up proper sanitation and hygiene facilities Color-coded trash bins	To disinfect and sanitize school facilities and equipment regularly To increase awareness for cleanliness and improve sanitation Ensuring proper segregation and disposal system of wastes	Administrative	Sanitary personnel strictly follow the schedule of disinfection of school facilities, rooms, and equipment (>95%) There are enough handwashing stations available in strategic locations with clean and safe water supply. Clean and maintained comfort rooms. Alcohol and sanitizers are provided in corners and rooms. (>90%) Everyone in school uses the proper bin and segregates their trash, especially used masks. The

				utility worker disposes correctly infectious trash and follows the DOH guidelines. (>90%)
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CONCLUSION

In earnest consideration of the findings, the researcher came up with the following conclusions:

1. The conduct of limited in-person classes in Medical Technology was excellent when evaluated in the areas of Policies, Health protocols, and Facility controls.
2. The leadership approaches employed by the School Heads in the conduct of limited in-person classes in Medical Technology were excellent, particularly in the key areas of Crisis Management, Communication and Consultation, and Compliance and Implementation.
3. The conduct of limited in-person classes in Medical Technology varies in the key areas of Policies and Health Protocols, however, in areas of Facility Controls and Instructions and Performance Tasks, they are similar.
4. The Leadership Approaches adopted by School Heads when considered in the areas of Crisis Management, Communication and Consultation, and Compliance and Implementation among the various schools are similar.
5. The best practices in the conduct of limited in-person classes in Medical Technology were Observing the minimum public health standards which include Wearing of mask, Hand hygiene, Physical distancing, Answering daily health checklists, Contact tracing, Wearing Personal protective equipment, Implementation of protocols and guidelines.
6. In a blended approach, remarkable measures and practices have implications for the leadership and instructional goals. The shifting and teaching modality was planned by the administration based on how best the protocols will be observed. This, too, has repercussions on how the competencies were achieved. To address the competencies, efforts may be directed towards the recalibration of the curriculum and course mapping. The school administration, taking into consideration the measures to curb the infection and maintain a safe environment for the students and staff shall have to be dynamic in making vital decisions.
7. A supervisory plan for effective and safe limited face-to-face instruction may be designed based on the Leadership Approaches adopted by the school heads.

Disclosure statement

The researcher has no conflict of interest to disclose.

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