# Disruption and distraction in online and physical classroom environments

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## オンラインと物理的な教室環境における混乱と気晴らし

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Abstract: This study examines the issue of student disruption and distraction in online and physical university classroom environments. The research was conducted by using a Student Disruption and Distraction (SDD) Questionnaire which garnered responses from two undergraduate General English Seminar classes. The SDD Questionnaire examined the intensity of frequency for both disruption and distraction as well as the main causes for each. In this way the study draws a distinction between perceptions of external disturbance factors and perceptions of self-distraction. The results indicate that online lessons present disturbance problems arising from partner unpreparedness, students becoming distracted by mobile phones/personal devices and gaming. Results regarding the physical classroom lessons showed that students were less distracted but more likely to being disturbed by proximate factors such as other students arriving late or talking. The paper presents pedagogic strategies which are targeted to resolve the main SDD problems in online and physical classroom environments.

Key words: disruption, distraction, university, classroom environment

#### 1. Introduction

Contained within the key didactic triangle of subject matter, the teacher and the student (Elmgren & Henriksson, 2014; Hillen & Landis, 2014), a crucial element which is required for teaching and learning activities to occur optimally is a constructive dialogue (Gibbs & Coffey, 2004) and an atmosphere of collaboration between the former and latter elements. As teaching and learning, including self-regulated learning (Kreber, Castleden, Erfani & Wright, 2005) are intensely social undertakings, it is not surprising that occasionally or consistently, as the particular case may be, stresses are put upon and breakages occur between the elements of the didactic triangle. Relational problems regarding the didactic triangle can be seen when students disengage from the subject matter, when positive teacher-student interaction breaks down, and when negative dynamics emerge between the students themselves.

#### The Didactic Triangle

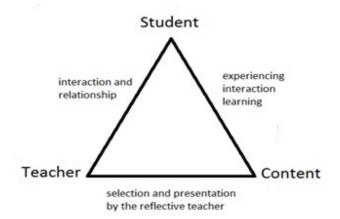


Figure 1: The Didactic Triangle from Hillen and Landis (2014).

A host of pedagogic literature focused on pre-primary, primary and secondary level education analyses the strategies and techniques that can be deployed in those classrooms where the students are children (Haydn, 2007; Hayes, 2006; Kerry & Wilding, 2004; Kim, Raza, & Seidman, 2019; Kyriacou, 1997; Kyriacou, 2007). This aspect of classroom management forms the central part of many books targeted at those lower educational levels. However, for many university teachers working with young adults/adults instead of children, and who are adapting to teaching on online platforms or alternating between online and physical classroom environments, the waters become more muddied and gaps emerge in the supporting literature despite some areas of useful knowledge being present (Schmidt, 2021). Furthermore issues emerge in online or alternating classroom environments such as the inherent authority of the teacher in reaching distracted/disengaged students, how to overcome situations where teacherstudent dialogue breaks down or where inter-student collaboration is displaced by disruption.

As noted above this muddied viewpoint is exacerbated by gaps in the literature surrounding recent rapid switches to online platforms as a response to the COVID-19 pandemic which emerged in spring 2020. Classes switching online has seen the rise in popularity of platforms such as Zoom, the development of hybrid classes which blend simultaneous online learning with traditional classroom learning (Yang & Spitzer, 2020) and a staggered alternation between online lesson and traditional lessons depending on the ebb and flow of the ongoing (at the time of this paper in winter 2021) pandemic.

The aforementioned issues regarding problems within the didactic triangle can be challenging parts of third level teaching for both new and experienced teachers depending on what skills they possess to manage such situations. Notably, a localized layer of consideration in relation to specific situations, factors and personalities in different institutions are all aspects to be cognizant of when considering implementing guidance on resolving classroom issues of disruption and distraction. That being said, it is important to provide educators with student perspectives on classroom disruption and distraction. This study presents the responses of students through a Student Disruption and Distraction (SDD) Questionnaire and offers potential teacher response strategies targeted to address those results.

### 2. Framing the Issue

While a constructive classroom environment is the ideal scenario (Elmgren & Henriksson, 2014), and is thankfully often present across a spectrum of lectures, seminars, reading groups and labs at universities, some questions do emerge regarding how prevalent student distraction and disruption is currently perceived to be in online and in physical (traditional) classroom settings. And further, in response to such questions how should university teachers manage situations on the ground where teaching and learning activities are below their desired optimum levels due to disruption, distraction and off-task behaviors (Jamet, Gonthier, Cojean, Colliot & Erhel, 2020)?

A significant amount of pedagogic research (Jamet et al., 2020; Lang, 2017; Schmidt, 2021) has demonstrated that when students are not focused on tasks within the classroom a "cascade of negative outcomes" can occur (Paul, 2013). Thus, issues surrounding students not being fully engaged, multi-tasking (Fernandes & Moscovitch, 2000; Schmidt, 2021) or being impeded due to classmates not being engaged are consequential. Research by May and Elder (2018) stated that:

The research indicates that media multitasking interferes with attention and working memory, negatively affecting GPA, test performance, recall, reading comprehension, note-taking, self-regulation, and efficiency. These effects have been demonstrated during in-class activities (largely lectures) and while students are studying. In addition, students struggle to accurately assess the impact media multitasking will have on their academic performance. (May & Elder, 2018, p. 1)

It is important to note that the point here is not to state that students are the sole potential cause of deteriorations in classroom learning environments, but rather that it is vital to focus on their perspectives regarding SDD issues to be able to offer improved support, understanding and management. The COVID-19 pandemic has seen shifts regarding the contextual strands surrounding teaching environments and many teachers have been operating in varying states of bubbles regarding how their lectures/seminars are undertaken or managed.

The conception for this paper arose from observing moments of assumed disruption or distraction within the aforementioned classroom environments and a desire to explore the issue more fully. For example, I had inclinations from seeing the faces of students that another student arriving late had interrupted the flow of their communicative immersion but was not certain. These inclinational moments as an educator, while reflectice, can be difficult to base a shift in pedagogic approach around or strategy upon. Thus a more thorough examination of the issue was considered worthwhile. The value-added aim of this paper is to seek out and to gather a snapshot of perspectives from students and for other educators to be able to reflect (Toohey, 1999), navigate and resolve SDD issues.

	Outcome	Description
		Learning tasks take more time to complete because of the time
1.	Temporal Issues	spent on distracting activities. Upon returning to a task the
		student has to refamiliarize with the material.
		Mental fatigue caused by switching between assigned tasks
2.	Mental Fatigue	and distracted activities (e.g. text messaging a friend).
		Cognitive cost is high when alternating between tasks that call
		for different sets of demands.
		If attention is divided during the encoding process the
3.	Memory	subsequent memory (long term retention) of what was worked
		on will be impaired. Impairment can also ripple out to nearby
		classmates.
		Distraction during learning impacts processing and storage of
4.	Decreased Transfer	information in less useful ways.
5.	Performance	Multi-tasking using media in off-task ways while learning is
		negatively associated with performance.

Primary	Negative	<b>Outcomes</b>	of Distracted	Learning

Table 1: Primary Negative Outcomes of Distracted Learning. Adapted from Schmidt (2021).

Recent research by Schmidt (2021) building on earlier work by (Paul, 2013) has identified several negative outcomes of distracted learning (refer to Table 1 above). These negative outcomes are wide ranging and touch on issues of memorization, poor performance, temporal issues and fatigue. Given the potential aforementioned consequences, developing knowledge and awareness around issues of disruption and distraction in classroom environments are important for both educators and students.

#### 3. Methodology

The choice of method for the study was a Student Disruption and Distraction (SDD) Questionnaire (please refer to the appendix of this article to view it). The purpose of the SDD Questionnaire was to establish the frequency and primary causes for students related to disruption and distraction in online and traditional classroom environments respectively.

The questionnaire was distributed in two General English Seminar (GES) classes at Muroran Institute of Technology (MuroranIT) in the winter of 2021. MuroranIT is a Japanese national university situated in Hokkaido, northern Japan. The university has approximately 3,000 students focused on pursuing hard science and engineering degrees. The course content for the respondent seminar classes focused on social, geographic and political aspects of the Anglosphere. Student enrollment in these classes was on a voluntary rather than compulsory basis.

50 students chose to answer the SDD Questionnaire across the two classes. As both of the GES classes followed the same syllabus and lesson content, and the fact that both classes were in the same year of their undergraduate degree, a justified amalgamation of the groups was undertaken for questionnaire analysis purposes.

The content of the questionnaire questions was derived from synthesising discussions in the literature regarding technology (May & Elder, 2018), the educational consequences of daydreaming in class (Lindquist & Mclean, 2011) and common external disturbance factors (Kyriacou, 2007). Frequency and intensity questions were integrated throughout the quesitonnaire to allow for an insight into how often and to what extent disruption and distraction were occurring.

The SDD Questionnaire was dispersed to the students in lesson 10 for one class and in lesson 11 for the other. Both GES classes follow a 15-week course schedule. The timing of this dispersal was to facilitate the students to be amply familiar with the flow of the lessons and to have had enough time to interact with and to have a sense of their peer groups. These student interactions were focused on partner and small group work in Zoom breakout rooms, and pair work with integrated partner rotation activities in the physical classroom.

Crucially, both of the GES classes had experienced a mixture of online lessons and physical classroom lessons during the approximate ten-week period leading up to the SDD Questionnaire. The online lessons were stacked at the outset of the course as a result of the ongoing COVID-19 pandemic (ongoing as of winter 2021). One class had four of their lessons online on Zoom, while the other had three online Zoom lessons. The remainder of the lessons were conducted in a traditional physical classroom environment.

It was made clear to the students both verbally and in writing that the questionnaire was optional and that they were not required to complete it should they desire not to. Both English and Japanese versions of the SDD Questionnaire were provided on the same document and students could freely choose which language to use. The SDD Questionnaire was distributed towards the end of the class period to minimize the impact on normal class time. A time limit of eight minutes was set for its completion in both cases.

The questionnaire was anonymous and so students did not record their names or student numbers. This anonymity was initially at the class group level upon collection of the questionnaire and then elevated to a multi-class level once the responses were collated. Given that the submission of the questionnaire was conducted through an in-person collection at the end of the respective classes a box was utilized where the students could drop the SDD Quesitonnaire into it. This approach reflects a desire to be cognizant of power imbalances and reduce levels of potential worry amongst students regarding the anonymity of their responses.

The decision to select a questionnaire as the appropriate tool was made due to the desire to throw a relatively wide net regarding the sample when compared to other potentially more in-depth techniques such as semi-structured interviews. By selecting a questionnaire, it enabled a snapshot of the previously mentioned issues related to disruption and distraction to be taken in a course wide context. The SDD Questionnaire contained closed questions to facilitate baseline data gathering. This enabled a useful snapshot to taken. The baseline scope of the study should be noted in that more qualitative elements were beyond the scope of this particular study.

The structure of the questionnaire addressed student experiences of SDD issues in several ways. Significantly, a distinction was drawn between disruption and distraction. For clarity, disruption was identified in the SDD Questionnaire as emerging from another student (e.g. having an unprepared partner). Distraction was identified as an internal (e.g. daydreaming) or external (e.g. mobile phone) factor for the student themselves. This distinction allows for a nuance to be present rather than disruption and distraction being considered as identical. The questions allowed for the intensity of frequency of the SDD issues to be looked at separately in online settings and traditional classroom settings. Given the aforementioned rapidity of the switch to online teaching and learning, considering these categories separately merited investigation. The questionnaire was comprised of a total of eight closed questions. Scaled responses were selected to help establish a picture in relation to frequency and causes of the SDD issues.

#### 4. Results

This following section of the paper presents the results based on the student responses to the SDD Questionnaire. The presentation of the results will follow the same question order as they were presented within the questionnaire itself. Questions 1 to 4 explore disruption in online and traditional classroom environments. Disruption involves being disturbed by someone else or their actions. These questions alternate between examining frequency and causes. Questions 5 to 8 examine the preceding issues but connected to distraction. Distraction does not involve

北海道言語研究会

someone else but rather an individual loss of focus. These questions also examine online and physical classroom environments to ensure balance.

Question 1 of the SDD Questionnaire was structured to determine the frequency of disruption connected to others that students experienced in online classroom settings, i.e. on the Zoom platform. This question allows us to gain an insight into the perspectives of respondents in a scaled fashion ranging from 'Almost Always', through several options that terminate with 'Never'. In this manner we can assess and gain an understanding into the intensity of the frequency. At 54% (n=27), most of the respondents stated that they had never experienced disruptions from others in online classrooms. For 24% (n=12) disruption was a seldom occurrence and for 16% (n=8) it occurred occasionally. For 4% (n=2) and 2% (=1) a perceived disturbance from others was occurring 'To a Considerable Degree' and 'Almost Always' respectively.

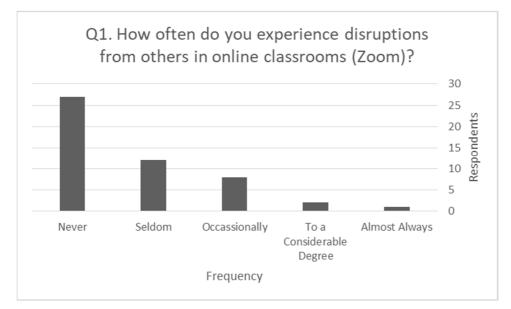
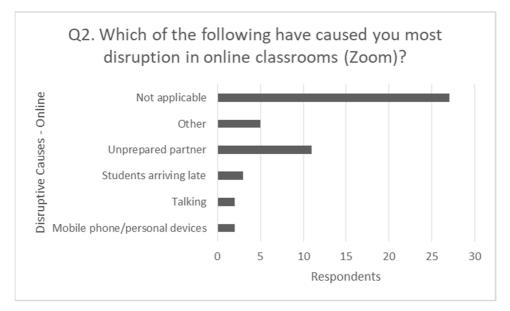


Figure 2: SDD Questionnaire Question 1.

When we consider these results, we can see that for 78% of respondents there was not a considerable frequency of disturbances occurring in their online classroom environment. This can be considered a positive result from a pedagogical viewpoint. However, that 6% of respondents perceived consistent disturbances means that a cognizance needs to be maintained in that online classes are not occurring without any disruptive dynamics occurring between students.

Question 2 was directly connected to Question 1 in that it examined which causes had the most disruptive influence in online classrooms. Outside of the 'Not Applicable' category with 54% (n=27), reflecting those who had never experienced disruption from others, the 'Unprepared partner' category received the most responses to this question with 22% (n=11).

The remaining categories received comparatively low responses. Often in online lessons students were broken into groups or pairs through the use of breakout rooms. During a breakout room session the students ideally interact, communicate and work towards completing a task together. The teacher in charge can visit different breakout rooms during the set task time but they cannot view all breakout rooms simultaneously, nor can they be omnipresent in all breakout rooms. The 22% figure indicates that during those independent periods an issue is potentially present surrounding peer to peer work and how it unfolds.





When we consider Question 1 and Question 2 together we can surmise that for most students disruption from others in the online classroom environment does not occur frequently. For those that do experience disruptions from others the most common point of disruption is from an unprepared partner.

The locational setting switched from online scenarios to traditional classrooms in Question 3. In the same fashion as Question 1, it sought to establish the intensity of frequency regarding disruption. The 'Never' category received the highest response rate with 42% (n=21). This represents a 12% drop in that category compared to online classroom settings, and thus a corresponding increase in the perceptions of disturbance is present. Both the 'Seldom' and the 'Occasionally' categories saw increases compared to the responses concerning online settings with 32% (n=16) and 20% (n=10) respectively.

These results indicate that there is a higher frequency of disturbance in the physical classroom when compared to the online classroom environment. Interestingly, the 'To a Considerable Degree' and 'Almost Always' categories constitute a combined 6% (n=3) which reflects the figure for the disturbance frequency in online classroom settings. By considering the disturbance frequency for

#### 北海道言語文化研究 No. 20, 133-153, 2022.

the traditional classroom and the online classroom settings together it becomes evident that a small number of students experience disturbances consistently or as a constant factor. What elements are causing the increase in disturbance from others in the physical classroom?

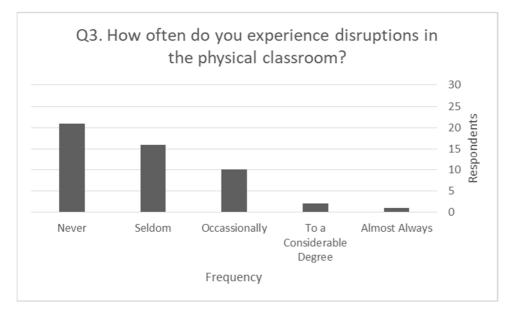
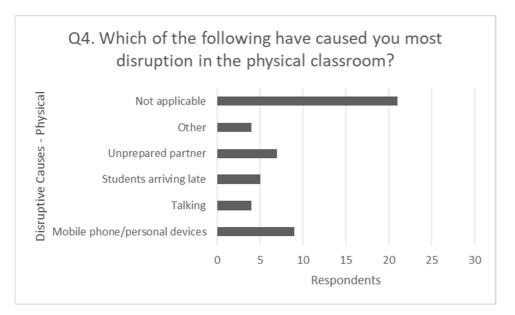


Figure 4: SDD Questionnaire Question 3.

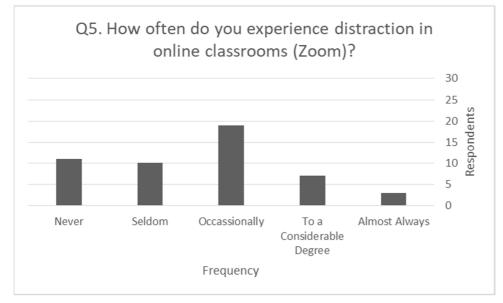
Question 4 provides an insight into what factors are causing the most disruptions in the physical classroom. Outside of the 'Not Applicable' category at 42% (n=21) the highest response rate came from the 'Mobile phone/personal devices' category with 18% (n=9). This 18% figure constitutes a large jump from the 4% figure (see Question 2) for the same category in the online classroom. The 'Unprepared partner' category saw a shift from 22% in the online environment to 14% (n=7) in the physical classroom. However, 'Students arriving late' at 10% (n=5) and 'Talking' at 8% (n=4) both represent increases in disturbance compared to the online classroom settings.



#### Figure 5: SDD Questionnaire Question 4.

Through these responses we can see that the physical proximity of other students can impact upon experiencing disruption in diverse ways. The drop in the 'Unprepared partner' category indicates an increase in conscientiousness towards partners within the physical classroom, but that the proximity of technological, verbal or temporal elements connected to others can have more immediate impacts.

The focus of the SDD Questionnaire shifts from examining disturbance to distraction from Question 5 onwards. As stated earlier, distraction is a loss of focus in oneself rather than a disturbance caused by another person or their actions. Question 5 sought to establish how often students experienced distraction in their online lessons. The highest response rate was in the 'Occasionally' category with 38% (n=19), while 20% (n=10) selected seldom. Only 22% (n=11) of respondents stated that they never experience being distracted in online classrooms. A notable 14% (n=7) said they experience distraction to a considerable degree, while 6% (n=3) almost always experienced it in online classrooms. These results for the frequency of distraction in online settings demonstrate a large degree of difference compared to issues of disturbance in online classes as presented in the preceding questions.



#### Figure 6: SDD Questionnaire Question 5.

Through Question 6 we can examine the dominant factors for distraction during online lessons. A significant result is present here as 40% (n=20) selected the 'Mobile phones/personal devices' answer. This is a large percentage result and is more than double the next nearest distraction factor of 'Gaming' at 18% (n=9). Remaining category responses of 'Daydreaming' at 8%, 'Other' at 6% (n=3) and 'TV' also at 6% (n=3) constitute much smaller causes. When Question 5 and Question 6 are reflected upon interconnectedly we can see a need for pedagogic strategies regarding assisting students in both focusing and managing mobile phones and personal devices while in online classroom settings.

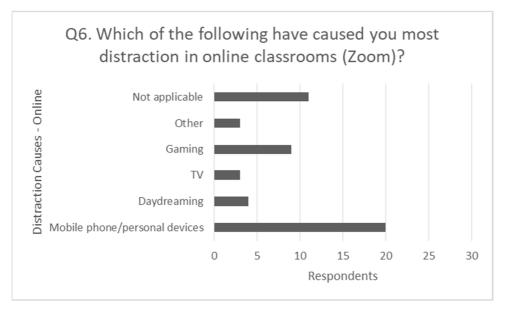
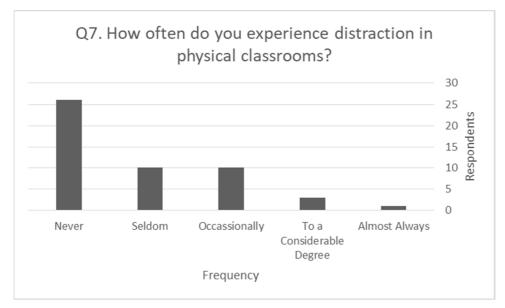


Figure 7: SDD Questionnaire Question 6.

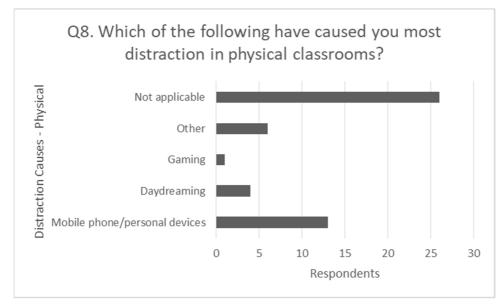


#### Figure 8: SDD Questionnaire Question 7.

The frequency of distraction for students in the physical classroom is explored in Question 7. 52% (n=26) in the 'Never' category, followed by 20% (n=10) in the 'Occasionally' category constitute the two largest frequency responses. Identically to the latter figure, 20% (n=10) of respondents said they are seldom distracted in the physical classroom. A relatively low percentage of respondents perceived themselves to be distracted to a considerable degree, or almost always distracted, with 6% (n=3) and 2% (n=1) of answers respectively.

When Question 7 and Question 5 are compared a meaningful difference emerges regarding the intensity of the frequency of distraction for online lessons compared to lessons conducted in the physical classroom. The spike of 38% of students becoming distracted occasionally in online lessons when compared to a figure of 20% for physical classroom lessons is illustrative of a tension between online lessons and student's ability to avoid distracted learning.

Question 8, the final question in the SDD Questionnaire, examined which elements caused the most distraction for students in the physical classroom. Outside of the 'Not applicable' category at 52% (n=26) for those students who felt they never got distracted, the highest factor was 'Mobile phone/personal devices' at 26% (n=13). 'Other' at 12% (n=6), 'Daydreaming' at 8% (n=4) and 'Gaming' at 2% (n=1) constitute the answers for the remaining categories.



#### Figure 9: SDD Questionnaire Question 8.

The results for Question 6, when considered together with the results for Question 8, indicate that mobiles phones and personal devices are the main source of distraction in both online and physical classroom environments. Albeit at a higher level in online classroom settings. The results also indicate that factors such as gaming pose more of a threat to students focusing when in online scenarios compared to being in the classroom. A small number of students tend to daydream in both classroom environments and this is useful for teachers to remain aware of as they observe and facilitate students at different points during their lessons.

#### 5. Discussion

Based on the data presented in the preceding results section, the key point that emerges for consideration and reflection is what strategies can educators deploy in both online and physical classroom contexts to counter particular SDD issues? The results of this study indicate that SDD issues are mixed in terms of the percentage of students that experience disruption or distraction, while a minority experience both on a consistent basis. Given that educators aim for inclusive classrooms where as many students as possible can be reached (Elmgren & Henriksson, 2014), strategizing around resolutions to these issues are worthy of consideration.

Disruption in online classes centered upon perceptions of partners being unprepared. As stated earlier, the online class partner work takes place in separated breakout rooms. A strategy to help resolve this particular issue may be to integrate the main room where all students are present together in a more meaningful way prior to forming and sending students into the separated breakout rooms. For example, the teacher could utilize an interactive class question, providing class sizes allow for it, where each student responds verbally or visually. This strategy would act as a type of warm-up and simultaneously allow students a moment of engagement with the teacher. In this way each student is theoretically brought more 'on-board'.

Regarding disruption in the physical classroom a more diversified field of problems emerged from the data. The main issues surrounded mobile phones, students arriving late and talking. As perceptions of partners being unprepared decreased in the physical classroom it can be postulated that students are engaging with their partners, but that sporadic issues arise due to peer proximity in the traditional classroom environment. A number of strategies and pedagogic skills can be used with immediacy in the physical classroom to reduce minor disruptions (Haydn, 2007; Kyriacou, 2007). Due to the proximity of the students and the teacher these can occur both in real-time during the lesson or in a post-lesson setting depending on the chosen approach. Research has shown (McKeachie & Svinicki, 2006) that an initial mixture of visual, verbal and physical cues from the teacher presents the student with an opportunity to cease their disruption without being identified directly. If the indirect low-level approaches do not resolve the disruption then more direct approaches become a possibility, but de-escalation should be strived for to maintain a positive classroom atmosphere for learning. The visual, verbal and physical cues from the teacher can be summarized in Table 2 below.

	Cue Type	Action		
1.	Visual	Look at the student to gain their attention and direct their attention back to the		
		task at hand.		
2.	Verbal	Raise the issue with the class group in a general comment. This frames the need		
		to re-focus attention without singling out the student.		
3.	Visual/Verbal	The teacher can become silent for a moment to allow the absence of their voice		
		to be a tool to re-focus attention		
4.	Physical	The teacher can physically move towards the disruption. Their physical		
		presence can often times be enough to re-engage focus.		
5.	Verbal	Directly asking the student to listen or if they have a question they need to ask.		
6.	Verbal	Directly telling the student that their behavior is not acceptable.		

Visual, V	/erbal	and	Physical	Cues
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Table 2. Cues of increasing directness for classroom management. Adapted from Kyriacou (2007).

While the preceding techniques are strategies to help stop disruption at source, there are some issues which require a more nuanced approach. An example of this may be a student who is consistently late. As noted in the results section, for some students this caused them disruption, as a student entering the class after it has already begun can be an interrupting force. For such a scenario the teacher can discuss the situation for a short time directly after the class period ends or have a more private discussion outside of the classroom at a set time to check on the student's well-being and any issues that may be hindering their full engagement with the course in a timely manner.

Frequent distraction occurring in online lessons was a significant result in this study and the main sources included mobile phones/ personal devices and gaming. The dispersed nature of an online class with many students being in their own homes means that the possibility of access to gaming platforms and other personal devices is increased. Mobile phones are more accessible too given the off-camera time during portions of online lessons. Research (Rimer, 2019) has shown that the over-use of mobile phones can cause interruptions in the flow of exchange in classrooms. A potential strategy to counter distraction is to increase the sets of tasks (Schmidt, 2021) which require attention and doing throughout the duration of a lesson. In this way, students are engaged through increased activity.

Distraction in the physical classroom was at a lower level than in online classes which indicates that being in the room reduces the possibility of becoming distracted. However, mobile phones/personal devices again surfaced as the primary cause for distraction in that environment. Implementing the visual, verbal and physical cues set out in Table 2 earlier in this section may hopefully to provide teachers with ways to reduce problems around this issue.

#### 6. Conclusion

This study set out to examine student disruption and distraction in online and physical classroom environments. This was achieved by using an SDD Questionnaire to gather responses from students and to explore the intensity of frequency and the causes of disruption and distraction. The results of the SDD Questionnaire demonstrated that online lessons pose problems regarding disruptions from partner unpreparedness, students becoming distracted by mobile phones/personal devices and gaming. Based on the respondents answers in this study, lessons conducted in the physical classroom offered a platform where students were less distracted but more prone to being disturbed by factors in their proximity, such as other students mobile phone usage, arriving late to class or talking. It is important to note that a majority of students responded that they never or seldom experience disruptions or distractions. However, it is imperative to reach as many students as possible with the practice of teaching and thus the issues of the minority remain worthy of consideration and pedagogic reflection (Elmgren & Henrikson, 2014).

A number of strategies were set out in the paper for resolving disruption and distraction in both the online and physical platforms. These ranged from increasing the levels of engagement in the main online classroom before dispersing students to separate breakout rooms, increasing the number of in-class tasks and activities, and using verbal, visual and physical cues in the physical classroom to stop SDD issues at source.

Given that online learning is likely to be a periodic if not constant teaching medium in the near to mid future, pedagogical workshops related to reflecting upon and managing SDD issues may be beneficial for educators to form and share peer-based resolution techniques. In this way a form of institutional knowledge could be created and preserved.

While it is hoped that the snapshot research presented in this study will be of use in understanding both frequency and causes of SDD, further future research undertaken in the area may benefit from the use of qualitative techniques to allow for an alternate exploration of the topic and issues raised within.

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#### Student Disruption and Distraction Questionnaire (SDD)

This is a research questionnaire about student disruption and distraction during lessons in both physical classrooms and online lessons (Zoom). This is an optional questionnaire. Any answers you provide will be anonymous.

'Disruption' in the questions below refers to another student's behavior during class which disrupts your learning (e.g. another student chatting near you). [Disruption involves another student.]

'Distraction' in the questions below refers to not being able to concentrate on learning because you become focused on other things (e.g. checking your mobile phone). [Distraction does not involve another student.] Please fill in one circle to answer. For example: Seldom

#### Q1. How often do you experience disruptions from others in online classrooms (Zoom)?

Almost Always	To a Considerable Degree	Occasionally	Seldom	Never
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#### Q2. Which of the following have caused you most disruption in online classrooms (Zoom)?

Mobile phone/personal devices Talking Students arriving late Unprepared partner

Other Not applicable

#### Q3. How often do you experience disruptions in the physical classroom?

Almost Always To a Considerable Degree Occasionally Seldom Never

#### Q4. Which of the following have caused you most disruption in the physical classroom?

Mobile phone/personal devices Talking Students arriving late Unprepared partner

Other Not applicable

#### Q5. How often do you experience distraction in online classrooms (Zoom)?

Almost Always To a Considerable Degree Occasionally Seldom Never

Q6. Which of the following have caused you most distraction in online classrooms (Zoom)?

Mobile phone/personal devices Daydreaming TV Gaming Other Not applicable

#### Q7. How often do you experience distraction in physical classrooms?

Almost Always To a Considerable Degree Occasionally Seldom Never

Q8. Which of the following have caused you most distraction in physical classrooms?

Mobile phone/personal devices Daydreaming Gaming Other Not applicable

#### 生徒の妨害行為と注意散漫に関するアンケート (SDD)

これは、物理的な教室とオンラインレッスン(Zoom)の両方において、レッスン中の生徒の混 乱や気が散ることについての調査用アンケートです。

このアンケートは任意のものです。いただいた回答は匿名となります。

以下の質問における「混乱」とは、授業中の他の生徒の行動があなたの学習を妨げることを指 します(例:他の生徒があなたの近くでおしゃべりしていること)。[混乱には他の学生が関与す る]。

以下の質問における「気が散る」とは、他のことに集中してしまい、学習に集中できないことです(例:携帯電話をチェックする)。[【気が散ることは他の生徒を巻き込むことではない】。] 回答は1つの丸に記入してください。例えば:滅多にない

**Q1. オンラインクラスルーム(Zoom)で他の人からの妨害を受ける頻度はどのくらいですか。** ほとんど常に かなりの頻度で 時々 滅多にない 全くない

**Q2. オンラインレッスンでの学習を最も妨げたのは、次のうちどれですか。** 携帯電話/パーソナルデバイス 話し声 遅刻してくる生徒 準備のできていないパートナー

その他 該当なし

### **Q3. 物理的な教室では、どのくらいの頻度で混乱を経験しますか。** ほとんど常に かなりの頻度で 時々 滅多にない 全くない

#### Q4. 物理的な教室での学習を最も妨げたのは、次のうちどれですか?

携帯電話/パーソナルデバイス 話し声 遅刻してくる生徒 準備のできていないパートナー

その他 該当なし

### **Q5.** オンラインクラスルーム(Zoom)では、どのくらいの頻度で気が散ることがありますか。 ほとんど常に かなりの頻度で 時々 滅多にない 全くない

#### Q6. オンラインクラスルームで最も気が散るのは次のうちどれですか。

携帯電話/パーソナルデバイス 白昼夢 テレビ ゲーム その他 該当なし

Q7. 物理的な教室では、どのくらいの頻度で気が散ることがありますか。

ほとんど常に かなりの頻度で 時々 滅多にない 全くない

#### Q8. 物理的な教室で最も気が散るのは、次のうちどれですか。

携帯電話/パーソナルデバイス 白昼夢 ゲーム その他 該当なし