Teaching Approaches and Best Practice in Large Group Teaching for Novice Educators: Real-world Example.

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Abstract.

This paper focuses on teaching and learning approaches that assist novice and other educators in higher education. These principles are applied to a real-world example of an undergraduate teaching session inclusive of local and international nursing students. Educational theory pertaining to the session is briefly discussed, however, the focus is on the teaching and learning strategies applied. Specific attention is afforded to lesson planning, active learning, and the use of technology in large group teaching. The responsibility of the educator to promote teaching credibility, student engagement, and pre-lecture preparation is reviewed with reference to key literature, while strategies to achieve best practice are proposed.

Keywords: Large group teaching, lesson planning, teaching approaches, student engagement, best practice guidelines, novice educators, educators, educational theory

1. Introduction.

This paper presents a large group teaching (LGT) experience with a focus on planning, preparation, and delivery. We provide the example of a single lecture and teaching strategies supported by a lesson plan. The context is undergraduate (UG) mental health nursing year one students based in the Republic of Ireland, with visiting students from the United States. Stemming from lessons learned from this class and previous teaching experience, *LGT Best Practice Guidelines* were developed to aid novice educators when preparing for LGT (see

Appendix 1). The importance of lesson planning and preparation, student engagement and teacher credibility were highlighted from lessons learned from this class and previous teaching experience. These were further developed so that the authors could have a quick reference guide to refer to when planning LGT for future classes. The LGT Best Practice Guidelines explore these three main categories in detail and outline the responsibility of the educator; some strategies that could be used to achieve best practice; and what the overall outcomes are in terms of LGT class delivery and student learning and engagement.

2. Background and context.

Lecturing emanates from the Latin term *lectare*, meaning to "read aloud" (Exley & Dennick, 2009), and has been the predominant method of teaching in higher education for centuries (Brown & Manogue, 2001; Exley & Dennick, 2009; Held & McKimm, 2009; Cantillon & Wood, 2010). It continues to be the main teaching approach used (Held & McKimm, 2009; Hughes & Quinn, 2013; Race, 2014; Gibbons et al., 2018). Despite this, the use of lecturing as an effective teaching strategy in education has caused on-going debate; the shift away from a teacher-led didactic approach to a student-centred active learning approach has created challenges for educators (Surgenor, 2010; Hughes & Quinn, 2013). Traditional lecturing may be considered as 'passive learning'; whereby the educator talks, and students take notes, listen, and potentially disengage (Cantillon & Wood, 2010; Short & Martin, 2011). Students do not have ownership of their learning (Gibbons et al., 2018) and regard this type of teaching as tedious and out of touch (Exley & Dennick, 2009). Additionally, lecturing is regarded as a method of keeping students under control (Race, 2014) consequently not encouraging critical thinking, analysis or shifting attitudes. Indeed, Held & McKimm (2009) suggest that traditional lectures are ineffectual in reaching the mixed preferences of the student cohort. Many students benefit more from active engagement or small group teaching strategies. Furthermore, students enjoy independent learning and technology-enhanced learning approaches, including videos, podcasts, and discussion boards (Dakka, 2015). Lectures, unless carefully crafted and prepared, may not cater for these diverse student needs. The importance of lesson planning and preparation is therefore essential to maximise the student learning experience, and this was considered when developing the LGT Best Practice Guidelines.

In the context of this paper, a two-hour lecture was delivered as part of a 'Foundations in Mental Health Nursing module' for which 26 first-year UG mental health nursing students were

registered. The topic, broadly, referred to the structures of the mental health services in Ireland. In addition, 31 first-year UG nursing students from a university in the Mid-West United States joined the group as they were spending a semester in Ireland, specifically to learn about Irish and European health services. The session took place in an active learning environment (ALE) with a student-centred focus. In this teaching context, an ALE is a large open, flat space with between 10-12 round tables with audio-visual capabilities. Emphasis was placed on interaction to better engage the large group of students. The session learning outcomes are presented in Table 1 as part of the over-arching lesson plan. Best practice advocates that the main themes and concepts of the lecture should be structured within a lesson plan, to ensure that salient information is communicated within a calculated timeframe (Exley & Dennick, 2009; Curzon & Tummons, 2013). It is useful to plan for teaching strategies that stimulate interest, interaction, gain and hold the attention of the students (Curzon & Tummons, 2013; Hughes & Quinn, 2013). This was taken into account when developing the LGT Best Practice Guidelines, in particular, incorporation of a change of pace activity within teaching strategies used in order to hold the attention of the students in the class.

Table 1: Lesson Plan Learning Outcomes.

Learning outcomes
At the end of the session the students will: • Differentiate the various members of the interdisciplinary / multi-disciplinary team in healthcare and the various abbreviations used in mental health settings. • Analyse differences between various mental health services, the level of service provision and the impact of the ‘post-code’ lottery effect in healthcare (Chow et al., 2010). • Distinguish differences between the various mental health structures including Community Healthcare Organisation areas, the Mental Health Division and the Health Service Executive.

2.1 Theory informing the lecture.

The learning outcomes for this lesson plan were guided by Bloom's (1956) taxonomy of learning, and were from the higher end of the taxonomy: differentiate, analyse, and distinguish. The rationale for using Bloom's taxonomy was to satisfy the requirements of the Nursing and Midwifery Board of Ireland (NMBI, 2016, 2022) who require outcomes-based curriculums. Aligned with Bloom's taxonomy, constructivist theory was embedded into the planning, since this approach focuses on the students as active participants in their learning journey and provides them with autonomy, which meant that students were at the centre and were facilitators of their learning (Hean et al. 2009). Also, the work of Kolb (1984) informed the lesson plan which sought to evoke the students' prior experiential learning on the topic, actively engaging them through various teaching strategies and incorporating reflective observation and active experimentation.

3. Best practice in large group teaching.

While the LGT Best Practice Guidelines are presented in some depth, a narrative is now provided to explore three areas of critical importance to teaching in large groups namely: lesson planning; student engagement; and teaching credibility and preparation. Nesari & Heidari (2014) delineate that lesson planning is the what, when, where, with, which and how of teaching and learning in higher education. Driscoll et al., (2013) suggest that too few faculty consider how local school-based research and educational technology can be built into each lesson plan. Race (2014) argues that more focus on linkages between lecture, module, year / stage, and overall programme is required: this may resonate with Biggs' (1999) concept of constructive alignment. Put simply, when teaching in large group lectures, faculty need to spend more time on addressing the issues in lesson planning in an integrated and intelligent fashion (Dix & Hughes, 2005; Exley & Dennick, 2009; O'Neill, 2015). Issues including perceived lack of time (Itua et al., 2012), failure to consider the needs of diverse students (Jabbar & Mirza, 2017) and student age and the cohort of different programme groups (Mulryan-Kyne, 2010) must be dealt with also.

In focusing on student engagement, Winston (2008) refers to students in the large group format (50 or more). Defining large group teaching is difficult, and Darling-Hammond (2021) suggests that definitions have evolved differently in various jurisdictions. While not providing a definition, Herbert et al. (2017) considers groups of more than 250 students large, while Mofrad (2013)

suggests that over 35 students constitute a large group. McAndrew et al. (2018) concede that there is no accepted definition, however, report that large groups at the University of Colorado Boulder have an average of 97 and a medium of 51 students. This heterogeneity and lack of an accepted definition is problematic. It is unclear whether strategies which work in groups of 50-100 are effective in larger groups especially those greater than 250. Formal evaluations may be required to clarify this and could be an area of further research focus. This was taken into consideration in developing the LGT Best Practice Guidelines when exploring student engagement. Despite these considerations, it appears likely that certain teaching characteristics and behaviours are more effective than others. Consequently, while implementing approaches detailed here will require careful consideration of the local context, we contend that scaling up is possible. For instance, it is essential that the lecture provides something which cannot be replicated via a book or online source (Hughes & Quinn, 2013; Binns, 2017). Otherwise, in the context of adult learning and time pressure, motivation to attend lectures may ebb. Fundamental aspects of a good lecture include: presenting the material in a clear and logical manner; focusing on practical application; and finding space for material not routinely accessible in textbooks. Demonstrating an enthusiasm for the topic at hand is also crucial (Henard & Roseveare, 2012). Clearly, despite the large size of some lectures, making effort to avoid passive student engagement is important. Matthew Stoltzfus in a TED Talk (TED, 2014) demonstrates how analytics can achieve this even in a large group. Educause (2012) outline the role of clickers and other educational technology aids. These cannot be utilised as an afterthought but as part of an integrated lesson plan, may produce a more active session. In fact, in spite of the potentially large numbers, depending on the teaching environment (for example, a large open space such as an ALE), it may be possible to build in small group activities such as snowballing, brainstorming, buzz groups or fish bowling (Bligh, 2006; Exley & Dennick, 2009).

Other strategies such as the spectrum model (deliberate use of diverse instructional strategies) (White, 2011), or creative controversy (fosters debate) (Johnson et al., 2008) may have merit. Cantillon (2003) outlines how partially completed diagrams or lists given to the student body to complete in the lecture may promote engagement. One must also consider the use of strategies such as signposting, focal points and summaries. Resisting the temptation to overload a lecture with content is certainly important (Dix & Hughes, 2005; White, 2011). Less may well be more, as advocated by Giddens et al., (2014). As Long & Lock (2008) illustrate, introducing too much new information too soon may stymie student learning and engagement, and it is suggested that student's attention may be lost after as little as twenty minutes. This emphasises the

importance of an interactive teaching strategy, as outlined above and is reflected in LGT Best Practice Guidelines in the section *Exploring student engagement*.

Textbooks and articles typically have a significant lag prior to publication (Bjork & Solomon, 2013). Therefore, the lecturer has some opportunity to enhance their own credibility by presenting the most recent and up-to-date information to students, even more so if it is their own or other institutionally led research. Teaching credibility is important (Fisher, 2005; Elliott & Wall, 2008), and if a lecturer can maintain this by actively referring to recent clinical practice, in turn, this enhances the student experience. Lavin et al., (2010) even report that lecturer attire can impact upon credibility. Incivility or rudeness can also be a factor amongst faculty (Muliira et al., 2017), which would be a matter of considerable concern if evident in practice. While the large lecture environment may mitigate against the professional teacher-student relationship, it cannot be denied that one exists (Hagenauer & Volet, 2014). This comprises both affective and support dimensions, which must be attended to if the professional relationship is to thrive. A matter, which can affect this relationship, is student behaviour in the lecture theatre; however, this must be managed compassionately, maintaining the dignity of all students if a high-quality learning environment is to be maintained.

Preparation is also a key consideration. Moravec et al., (2010) outline a strategy they entitle 'Learn before lecture'. This simply involves a large class actively engaging with material via pre-class worksheets, which require digital submission – thus tracking whether the work was done. While different to the flipped classroom in that activities are exclusively prior to the session and not during, actively engaging students is fundamental to both. Such an approach requires that the lecturer themselves is prepared – a characteristic which is appreciated by the student body (Su & Wood, 2012; Oksinski & Hernandez, 2013; Meguid & Collins, 2017). It must also be stated that attending to the physical environment is important. Hughes & Quinn (2013) discuss seating arrangements - some lecture theatres have fixed seats and the suitability of this must be considered. Temperature, lighting, and external noise should also be explored and remedied proactively (Fry et al., 2009).

It also may be said that lectures must provide something which the student body cannot routinely access elsewhere. There must be obvious links between lectures, module, stage and programme outcomes while links to assessment cannot be overlooked (Race, 2014). Students are driven and motivated by assessments; these must be aligned with learning outcomes as this can improve engagement in class if they know they are to be assessed on material being

covered (Binns, 2017). Specific practical strategies to engage students include in-session activities while mandating a task in advance of attendance may also be considered (Ashwin, 2005). In this session, students were regularly offered verbal feedback at multiple points following each of the classroom-based activities. Teaching credibility, the teacher-student relationship, in-class discipline, and consideration of the physical environment all require attention if excellence in LGT is to be approached. In an era where student - teacher ratios continue to rise despite concerns (Benavides et al., 2010) the importance of this topic cannot be under-appreciated.

3.1 Lecture delivery, implementation, and rationale.

A series of teaching strategies were adopted in the lecture to enhance learning. While the learning outcomes are included in Table 1, several specific strategies were adopted (see Table 2), many of which are outlined by Enerson et al., (2004) including misconception / preconception check. Indeed, Gagné's (1985) ideas concerning gaining attention and stimulating recall of prior learning as outlined by Buscombe (2013) were also influential. At the outset, following a brief introduction, students were assigned a number and split into assorted groups which included both international and Irish students. Each group was asked to outline, using tabletop flipcharts, a case study of what they perceived the structures of a mental health service should look like. Essentially, this is in keeping with Kolb's (1984) ideas regarding the phases of a learning style inventory and how various learners from accommodator, diverger, assimilator to converger can be engaged. Arguably, this is redundant as Newton (2015) and Rohrer & Pashler (2012, p.635) suggest that there is "no empirical justification for tailoring instruction to students' supposedly different learning styles". However, students may have certain preferences for learning and they may prefer particular educational modalities or teaching strategies over others, for example live online versus face-to-face lectures. Learning preferences differ from learning styles as they do not depend on a learner needing all education to be delivered through one style. This was taken into account when developing the Best Practice Guidelines for LGT as learners may retain more information through the lecturer providing multiple modalities in their teaching strategies. Open questions were routinely used following all learning activities to enhance student participation as recommended by Egan (2013). Using Prezi (a guide to the technological tools used in the session is provided in Table 2), some theory was presented, and this drew on both the empirical, academic literature and the extant grey literature. The intention was to make explicit the links

between the ideas and perceptions students presented to each other on their tabletop flipcharts and what the theory suggests the structures of the mental health services should be. In *Make it Stick*, Brown (2014) argues that student-led participatory experiences can enhance recall and learning. Equally, Freire and Knowles, as outlined by Cantillon & Wood (2010), suggest that starting with the students' lived experience as the initial basis for a teaching session is helpful. Freire, in particular, railed against the notion of the student as a passive learner (Freire, 1968, 1973).

Table 2 – Technology Resources Used in the Session

Resources	Examples of application
Prezi (Presentation)	Prezi may allow for online collaboration between students; Added audio-visual and graphic application; facilitates online accessibility (Strasser, 2014); generates greater student interest (Lam, 2014); and results in improved in-class engagement (Kiss, 2016).
Socrative (Online student response system)	Smartphone ownership in Ireland is estimated at 96% for 15-34 year-olds (Thinkhouse, 2014). Consequently, it is reasonable to expect that students can access a smartphone; Socrative can increase student results (Heaslip, 2014) and facilitates better overall engagement (Dervan, 2014).

It is also worth noting how the use of an 'Abbreviations Quiz' can be a fun way to provoke interaction. It has been argued that an impish approach to teaching can precipitate learning (Lucardie, 2014; Jeder, 2015; Tait et al., 2015) and stylistically this was evident. This may involve, used sparingly and within the boundaries of professional practice, making lectures memorable by the good use of humour in sessions, with the intention of bolstering student interest. Socrative student response system, requiring access to a smartphone and not always routinely used, was another useful adjunct. It helped identify gaps in student knowledge through

the use of interactive quizzes (Dakka, 2015) towards the conclusion of the session while Prezi, with its additional functionality can be visually fresh and appealing (Strasser, 2014). As year one students, coupled with a lack of knowledge of the United States curriculum, the opportunity to link with other modules appeared more limited. The advantage of having students from another jurisdiction facilitated rich discussion on social determinants of mental health, politics, and funding which certainly piqued student interest. Typically, making links across modules and stages is a legitimate educational aim (Race, 2014). Such practice minimises siloing, and subsequently may facilitate year or stage level assessment and enhances student learning gain (Redmond et al., 2018).

The concept of 'feed forward' (as expounded by Hine & Northeast, 2016) was employed in this session as effort was made to link the material on structures and services available with students' upcoming clinical placements. Recognising how care transitions occur in both Ireland and the United States, for example, a person being discharged from an acute mental health facility, linking with a day hospital, supported by a community mental health nurse, was a central theme in the discussion. This helped to highlight the relevance of the session for the students and allowed for shared, intra-jurisdictional learning and interpersonal interaction. In picking apart the structure of the inter-disciplinary or multi-disciplinary team within this session, students received real time feedback on their understanding of this construct as advocated for by Sargeant et al., (2011). Linking this with the Socrative questions at the end of the session and being of practical value for placements helped focus the student's attention and enabled the lecturer to address any gaps in their knowledge before they left the classroom (Kogan et al., 2000; Spendlove, 2009; Ball, 2010).

A focus on students working in groups was apparent, taking advantage of the diversity of the international and Irish students. Such work is supported by Regan (2003) who elucidates how teamwork can act as a motivator for self-directed learning. In this teaching example, each student group was given a chapter of 'A Vision for Change' (DoH&C, 2006), the Irish mental health policy framework and asked to summarise same for presentation to the wider group. Tempting as it was to encourage creative means of presentation such as use of props, humour, or creative controversy, presentations were in a standard format, tabletop flipchart or oral presentation. This seemed to engender *esprit de corp* and opportunity for teamwork and peer feedback. Contrasting the Irish and international policy frameworks stimulated a lively discussion on American mental health policy. The session concluded with a review of learning outcomes achieved and an opportunity for student reflection / evaluation.

4. Lessons learned: reflection and challenges.

Student feedback was used to reflect on the session and Gibbs' Reflective Cycle (Gibbs, 1988) informed this. For novice or other educators, it is important to have awareness of how relevant educational theory can be applied. In the teaching example given, drawing on the experience of an international and local group of students made for a more informative, enriching session. Engaging with lived experience in this manner is advocated strongly in social constructivist theory (Berger & Luckman, 1966). Making linkages with students' recent past educational engagements and, judicious use of technology in the classroom worked very well, both concepts explored in the context of best practice in LGT. Student led discussion also seemed best in prompting recall and attention while checking preconceptions and misconceptions was important given the student diversity inherent.

While engaging international and local students simultaneously might seem a challenge, this can be re-framed (as Egan, 2013 suggests) and seen as a significant positive. Their presence certainly did bring some frisson to proceedings. Again, with reference to preparation – ensuring that how to operate the lights and windows in the classroom is known was essential to prevent delays and promote a professional stance. Acknowledging one's personal learning preference is important. Assuming that a one-size fits all approach based on personal proclivity is incorrect. There is little doubt that several of the learning theories and other material presented in preceding sections call for a more active and eclectic approach to teaching sessions. It is important to recognise that this may be arduous and requires more investment of energy and preparation at least initially. At the most basic level, transporting ten tabletop flipcharts and markers is technically more challenging than providing a question and answer-based presentation. Nevertheless, having used post-it notes as an evaluation tool, this effort does not seem to go unnoticed by the students.

Unfortunately, despite investing time into the overall preparation of the session, minor difficulties with timekeeping were apparent. It would have been advantageous to have an additional ten minutes directly before the session. In addition, in an effort to engage students, up to seven different learning modalities were utilised in the session. This also impacted on timekeeping and may have been over-stimulating for some students. In fact, overuse of modalities may have the opposite effect to that intended and lead to learner confusion (Tanner, 2013). Overuse also is counter to the guidelines presented in this paper, and with the benefit of reflection, should be avoided. Ziapour et al., (2015) refer to the importance of time management in nursing and health

services and it would be timely, no pun intended, to heed this advice. Additionally, focusing on the interdisciplinary team, abbreviations, and clinical services such as day hospitals and phlebotomy clinics seemed relevant to the students. It is not certain that discussion of wider health service organisational structures at the national level, as alluded to by Frawley et al., (2018) was appropriate with respect to the student's stage on their education journey and this was reflected in student feedback. Ensuring that material is delivered at the correct pitch is a fundamental aspect of quality teaching (Su & Wood, 2012; Palis & Quiros, 2014). The lessons learned from this class and previous teaching experience enabled the development of the LGT Best Practice Guidelines which is a useful reference guide to refer to when planning future LGT sessions as it provides practical strategies to employ to maximise planning and student engagement.

5. Conclusion.

Brodsky & Newman (2011) elucidate the value of needs assessments, setting goals and learning objectives, resource identification, development of educational strategies and evaluation. Doing the aforementioned for all sessions is pivotal to successful teaching. This paper has examined key aspects of LGT in the form of the lecture and presents these in detail in Appendix 1. The LGT Best Practice Guidelines developed by the authors provide a useful reference guide for educators and novice educators to refer to when planning LGT for future classes. Given the enduring popularity of the lecture, even post Covid-19, it is incumbent upon all educators but particularly novice educators to ensure their proficiency and practice in LGT is of an excellent standard. It is also the case that increasingly universities are engaged in a process of internationalisation. This process will draw into sharp focus the need to adopt teaching strategies that incorporate student diversity. More especially, we assert that a focus on lesson planning and preparation, student engagement and teaching credibility are the cornerstones of a successful approach, as outlined in this real-world example. A working knowledge of educational theory, notably social constructionism, will prove important if the full benefit of this development is to be harnessed for the novice/other educators and beyond.

References.

Ashwin, P. (2005). Variation in Oxford student's experience of the Oxford tutorial. *Higher Education*, *50*(4), 631 – 634.

Ball, E. (2010). Annotation an effective device for student feedback: a critical review of the literature. *Nurse Education in Practice, 10*, 138-143.

Benavides, S., Garcia, A., Caballero, J. and Wolowich, W. (2010). The Impact of Student-Faculty Ratio on Pharmacy Faculty Scholarship. *American Journal of Pharmaceutical Education*, *74*(8), 138 – 145.

Berger, P. and Luckmann, T. (1966). *The Social Construction of Reality. A Treatise in the Sociology of Knowledge.* Anchor Books, New York.

Biggs, J. (1999). What the student does: teaching for enhanced learning. *Higher Education Research and Development, 18*(1), 57 – 75.

Binns, C. (2017). *Module Design in a Changing Era of Higher Education*. Palgrave Macmillan, London.

Bjork, B. and Solomon, D. (2013). The publishing delay in scholarly peer reviewed journals. *Journal of Informatics, 7*(4), 914 – 923.

Bligh, D. (2006). *What's the Use of Lectures?* Fifth Edition. Intellect, Bristol.

Bloom, B.S. (1956) *Taxonomy of Educational Objectives, Handbook: The Cognitive Domain.* New York: David McKay.

Brodsky, D. and Newman, L. (2011). Educational perspectives: a systematic approach to curriculum development. *NeoReview,* 12(1), 2 – 9.

Brown, G. and Manogue, M. (2001). AMEE Medical Education Guide No. 22: refreshing lecturing: a guide for lecturers. *Medical Teacher*, *23*(3), 231 – 244.

Brown, P. (2014). *Make it Stick: The Science of Successful Learning*. Harvard University Press, Boston.

Buscombe, C. (2013). Using Gagne's theory to teach procedural skills. *The Clinical Teacher, 10*(5), 302-307.

Cantillon, P. (2003). Teaching large groups. *British Medical Journal, 326*, 437 – 439

Cantillon, P. and Wood, D. (2010). *ABC of Teaching and Learning in Medicine*. Third Edition. BMJ Books, Birmingham.

Chow, A., Mayer, E., Darzi, A. and Athanasiou, T.(2010). Patient Satisfaction in Surgery. In: Athanasiou, T., Debas, H. and Darzi, A., eds. Key Topics in Surgical Health and Methodology. London: Springer, 165 – 172.

Curzon, L. and Tummons, J. (2013). *Teaching in Further Education: An Outline of Principles and Practices*. Seventh Edition. Bloomsbury, London.

Dakka, S. (2015). Using Socrative to enhance in-class student engagement and collaboration. *International Journal on Integrating Technology in Education, 4*(3), 13 – 19.

Darling-Hammond, L. (2021) Defining teaching quality around the world. *European Journal of Teacher Education*, *44*(3), 295 – 308

Department of Health & Children (DoH&C) (2006). *A Vision for Change: Report of the Expert Group on Mental Health Policy.* Stationery Office, Dublin.

Dervan, P. (2014). Enhancing In-Class Student Engagement Using Socrative (an Online Student Response System): A Report. *AISHE-J, 6*(3), 1801 – 1812. Available: https://ojs.aishe.org/index.php/aishe-j/article/view/180/283

Dix, G. and Hughes, S. (2005). Teaching students in the classroom and the clinical skills environment. *Nursing Standard, 19*(35) 41 – 47.

Driscoll, E., Comm, C. and Mathaisel, D. (2013). A lesson plan for sustainability in higher education. *American Journal of Business Education, 6*(2), 255 – 266.

Educause (2012). *Game Changers: Education and Information Technologies*. Educause, Louisville.

Egan, G. (2013). The *Skilled Helper: A Client Centred Approach*. Cengage, London.

Elliott, M. and Wall, N. (2008). Should nurse academics engage in clinical practice? *Nurse Education Today, 28*(6), 580 – 587

Enerson, D., Plank, K. and Neill Johnson, R. (2004). *Planning a Class Session – A Guide for New Teachers*. Pennsylvania State University, Pennsylvania.

Exley, K. and Dennick, R. (2009). Giving a Lecture from Presenting to Teaching – Key Guides for Effective Teaching in Higher Education. Second Edition. Routledge: London.

Fisher, M. (2005). Exploring how nurse lecturers maintain clinical credibility. *Nurse Education in Practice, 5*(1), 21 – 29.

Frawley, T, Meehan, A. and De Brún, A. (2018). Impact of organisational change for leaders in mental health. *Journal of Health Organization and Management, 32*(8), 980 – 1001.

Freire, P. (1968). *Pedagogy of the Oppressed*. Penguin Education, London.

Freire, P. (1973). *Education for Critical Consciousness*. Seabury Press, New York.

Fry, H., Ketterridge, S. and Marshall, S. (2009). *A Handbook for Teaching and Learning in Higher Education*. Third Edition. Routledge, London.

Gagné, R.M. (1985). *The Conditions of Learning and Theory of Instruction*, 4th ed., New York: Holt, Rinehart, and Winston.

Gibbons, R., Villafane, S., Stains, M., Murphy, K., Raker, J. (2018). Beliefs about learning and enacted institutional practices: an investigation in postsecondary chemistry education. *Journal of Research in Science Teaching*, *55*(8), 1111 – 1133.

Gibbs, G. (1988). Learning by Doing: A Guide to Teaching and Learning Methods. Oxford: Further Education Unit.

Giddens, J., Lauzon-Clabo, L., Gonce-Morten, P., Jeffries, P., McQuade – Jones, P., Ryan, S. (2014) Re-envisaging clinical education for nurse practitioner programs: themes from a national leaders dialogue. *Journal of Professional Nursing*, *30*(3), pp.273 – 278.

Hagenauer, G. and Volet, S. (2014). Teacher – student relationship at university: an important yet under-researched field. *Oxford Review of Education, 40*(3), 370-388.

Hean, S., Craddock, D. and O'Halloran, C. (2009). Learning theories and interprofessional education: a user's guide. *Learning in Health and Social Care, 8*(4), 250-262.

Heaslip, G., Donovan, P. and Cullen, J. (2014) Student response systems and learner engagement in large classes*. Active Learning in Higher Education*, *15*(1), pp. 11-24 Held, S. and McKimm, J. (2009). Improve your lecturing. *The British Journal of Hospital Medicine,* 70(8), 248-251.

Henard, F. and Roseveare, D. (2012*). Fostering Quality Teaching in Higher Education: Policies and Practices*. Organisation for Economic Co-operation and Development, Paris.

Herbert, C., Velan, G.M., Pryor, W.M. *et al.* (2017) A model for the use of blended learning in large group teaching sessions. *BMC Medical Education,* 17, 197 (2017). https://doi.org/10.1186/s12909-017-1057-2

Hine, B. and Northeast, T. (2016). Using feedforward strategies in higher education. *New Vistas, 2*(1), 28-33.

Hughes, S. and Quinn, F. (2013). *Quinn's Principles and Practice of Nurse Education*. Sixth Edition. Cengage Learning, Hampshire.

Itua, I., Coffey, M., Merryweather, D., Norton, L. and Foxcroft, A. (2012). Exploring barriers and solutions to academic writing: Perspectives from students, higher education, and further education tutors. *Journal of Further and Higher Education,* 38(3), 305-326.

Jabbar, A. and Mirza, M. (2017). Managing diversity: academic's perspective on culture and teaching. *Race, Ethnicity and Education*, *21*(3), 220-231.

Jeder, D. (2015). Implications of using humour in the classroom. *Procedia – Social and Behavioural Sciences,* 180(2015), 828-833.

Johnson, D., Johnson, R. and Holubec, E. (2008). *Cooperation in the Classroom*. Eight Edition. Interaction Book Company, Minnesota.

Kiss, G. (2016). MS powerpoint vs prezi in higher education. The Turkish Online Journal of Educational Technology, *15*(3), 136 – 140.

Kogan, J., Bellini, L. and Shea, J. (2000). Have you had your feedback today? *Academic Medicine,* 75(10), 1041.

Kolb, D. (1984). *Experiential Learning: Experience as the Source of Learning and Development.* Prentice Hall, New Jersey.

Lam, A. (2014) Evaluating the Effectiveness of Prezi in Higher Education. Journal of Medical Imaging and Radiation Sciences Research Informing Practice, *5*(2), 174.

Lavin, A., Davies, T. and Carr, D. (2010). The impact of instructor attire on student perceptions of faculty credibility and their own resultant behaviour. *American Journal of Business Education, 3*(6), 51 – 62.

Long A and Lock B (2008). *Lectures and Large Groups*. Association for the Study of Medical Education, Edinburgh.

Lucardie, D. (2014). The impact of fun and enjoyment on adult's learning. *Procedia – Social and Behavioural Sciences, 142*(2014), 439 – 446.

Meguid, E. and Collins, M. (2017). Student's perceptions of lecturing approaches: traditional versus interactive teaching. *Advances in Medical Education and Practice*, *8*, 229-241.

McAndrew, A., Dykeman, T., Fell, C. and Nussbaum, B. (2018). *Unpacking the student experience in large lectures. Educause Review*. [Online]. Available at: https://er.educause.edu/blogs/2018/10/unpacking-the-student-experience-in-large-lectures.

Mofrad, M. (2013). Using a blended learning model for large group teaching in medical education. *Biomedical Pharmacological Journal*, *6*(2), 8 – 15.

Moravec, M., Williams, A., Aguilar – Roca, N. and O'Dowd, D. (2010). Learn before Lecture: A Strategy That Improves Learning Outcomes in a Large Introductory Biology Class. *CBE Life Sciences Education, 9*(4), 473 – 481.

Muliira, J., Natarajan, J., Van der Colff, J. (2017). Nursing faculty academic incivility: perceptions of nursing students and faculty. *BMC Medical Education, 17*(253), 1 – 10

Mulryan-Kyne, C. (2010). Teaching large classes at college and university level: challenges and opportunities. *Teaching in Higher Education, 15*(2), 175 – 185

Newton, P. (2015). The learning styles myth is thriving in higher education. *Frontiers in Psychology, 6*(1908), 1 – 5.

Nesari, A. and Heidari, M. (2014). The important role of lesson planning on educational achievement of Iranian EFL teachers' attitudes. *International Journal of Foreign Language Teaching and Research*, 3(5), 25 – 31.

Oksinski, I. and Hernandez, M. (2013). Study of the qualities of a good university lecturer of health sciences. *Procedia – Social and Behavioural Sciences, 89*(2013), 342 – 350.

Nursing and Midwifery Board of Ireland (NMBI) (2016) *Nurse Registration Programmes Standards and Requirements,* [online] available: https://www.nmbi.ie/nmbi/media/NMBI/Publications/nurse-registration-education-programme.pdf?ext=.pdf. [Accessed Dec 3 2020].

Nursing and Midwifery Board of Ireland (NMBI) (2022) Professional Standards Nursing. Section 3: Requirements for the Approval of Education Bodies, Associated Health Care Providers and Educational Programmes Leading to Regisration, [online] available: *https://www.nmbi.ie/NMBI/media/NMBI/Nurse-Registration-Programmes-Standards-and-Requirements-Section-3.pdf?ext=.pdf* [Accessed June 6 2022].

O'Neill. G. (2015). *Curriculum Design in Higher Education: Theory to Practice*. UCD Teaching and Learning, Dublin.

Palis, A. and Quiros, P. (2014). Adult learning principles and presentation pearls. *Middle East African Journal of Ophthalmology, 21*(2), 114 – 122.

Race, P. (2014). *Making Learning Happen: A Guide for Post-Compulsory Education*. Third Edition. Sage, London.

Redmond, C., Davies, C., Halligan, P., Joye, R., Carroll, L. and Frawley, T. (2018). Nursing and midwifery students' perception of learning enablers and gains in the first semester of their BSc programmes: a cross sectional survey. *Nurse Education Today*, *65*, 242 – 249.

Regan, J. (2003). Motivating students towards self-directed learning. *Nurse Education Today, 23*, 593 – 599.

Rohrer, D. and Pashler, H. (2012). Learning styles: where's the evidence? *Medical Education*, *46*(7), 630 – 635.

Sargeant, J., McNaughton, E. and Mercer, S., Murphy, D., Sullivan, P. and Bruce, D. (2011). Providing feedback: exploring a model (emotion, content, outcomes) for facilitating multisource feedback. *Medical Teacher, 33*(9), 744 – 749.

Spendlove, D. (2009). *Putting Assessment for Learning into Practice.* Continuum International, London.

Strasser, N. (2014). Using prezi in higher education. *Journal of College Teaching and Learning, 11*(2), 95 – 98.

Su, F. and Wood, M. (2012). What makes a good university lecturer? Students perceptions of teaching excellence. *Journal of Applied Research in Higher Education, 4*(2), 142 – 155.

Tanner K. D. (2013). Structure matters: twenty-one teaching strategies to promote student engagement and cultivate classroom equity. *CBE Life Sciences Education*, *12*(3), 322 – 331. https://doi.org/10.1187/cbe.13-06-0115

Tait, G., Lampert, J., Bahr, N. and Bennett, P. (2015). Laughing with the lecturer: the use of humour in shaping university teaching. *Journal of University Teaching and Learning Practice, 12*(3), 1 – 15.

TED (2014). *How Socrates can stimulate your brain activity: Matthew Stoltzfus at TEDx Ohio State University*. [Online] TED Talk. Available: https://www.youtube.com/watch?v=o8a1dsv5IXo [15 April 2019].

Thinkhouse (2014). Irish Mobile Youth Report. Available: https://thinkhouse.ie/downloads/mobilereport/Full-Report-Thinkhouse-Mobile-Youth-Survey.pdf. [15 April 2019].

White, G. (2011). Interactive lecturing. *The Clinical Teacher, 8*(2), 230 – 235.

Winston, P. (2008). *Lecturing Heuristics.* [Online] Available: https://users.cs.duke.edu/~brd/Teaching/Giving-a-talk/phw.html [March 14 2019].

Ziapour, A., Khatony, A. and Kianipour, N. (2015). Evaluation of time management behaviours and related factors in senior nurse managers. *Global Journal of Health Science 7*(2), 366 – 373.

Appendix 1: LGT Best Practice Guidelines.

Categories	Responsibility of the Educator	Strategies to Achieve Best Practice Guideline	Outcome
1. Lesson Planning and preparation	• Know the stage of education at which the students are at, particularly in relation to the programme, year and level (undergraduate or postgraduate). • Be familiar with the curriculum, particularly in relation to the course and module content, what module content has been previously covered prior to this class, and what the learning outcomes for the module are.	• Plan ahead and develop a lesson plan for the class in advance of the lecture date. • Be selective about what is put into the lecture and synthesise information from a variety of sources. It is important to avoid overloading presentation slides with too much information. • Formulate clear learning outcomes and objectives for the session in accordance with Blooms' (1956) taxonomy and the learning outcomes of the module.	• Deliver the class at the right level for the student's needs, whilst acknowledging and building on the student's previous clinical experiences and backgrounds. • The use of pre class activities places responsibility on to the student for their own learning whilst enabling the educator to focus on teaching the new material e.g., additional readings. • Linking information encourages the student to make connections between topics and facilitates further learning.

	• Provide the context in which the student can learn. • Research the evidence and read up on the topic. • Decide on what teaching strategies will be incorporated into the session. • Determine and allow enough time for the planned activities/teaching strategies to allow for feedback and discussion. • Be aware of the time and duration of the class.	• Employ a variety of LGT strategies appropriate to the content being delivered, for example, PowerPoint presentation, questioning, discussion, case studies, or buzz groups. • Teaching methods should suit the learning outcomes for the class.	• Ensure a student-focused environment that is conducive to learning. • Adequately prepare and be confident so that the lecture is presented within the allotted time.
2. Student engagement	• Create a positive atmosphere for learning by meeting the psychological and safety needs of the students.	• Provide an introduction at the start of the class. • Address students by their names depending on the size of the class.	• Active participation in class can assist students to focus their attention during the lecture. • By creating a positive atmosphere of psychological safety, this allows the students to engage in

	• Know the content and be familiar with the technology and technology facilities available in the class. • Avoid reading lecture material and maintain eye contact with the students to engage them in the class. • The pace of delivery needs to be considered, as this can be increased due to nervousness. • Awareness of non-verbal communication such as facial expressions, distracting habits such as pacing, excessive hand movements, using filler words and non-words	• Use fun activities in class such as games, competitions, quizzes, and mobile technology to engage the students. • Use visuals to support, not replace content and avoid using too many PowerPoint slides. • Use the microphone on the podium to project your voice if required. • Speak clearly and loudly enough to be heard in the back of the room. • Gestures such as eye contact and head nodding can be useful in encouraging learners to speak in class. • Pause regularly. • Repositioning hands or holding notes may help the 'nervous hands problem'. • Make a list of alternative words that could be substituted for frequently repeated phrases or filler words.	the class and feel free to ask questions and volunteer comments in the class. • Active participation in class can assist students to focus their attention during the lecture.

	(e.g., ah, uh), and repetitious phrases. • Avoid standing behind the podium for the duration of the lecture.	• Occasionally step away from the podium and towards the listeners to convey an attitude of warmth and acceptance. • Use humour to engage the students in the class. • Ensure the lecture room is brightly lit, warm, and with proper ventilation in place. • Set ground rules in conjunction with the students at the start of class, for example, no mobile phones to be used during class. • Have pre-planned activities developed prior to the session in order to keep the session focused. • Establish times for comfort breaks with students for the class. • Demonstrate respect for the class, and support individual contributions from students, where appropriate in the class.	

3. Teaching Credibility	• Get to know your students. • Be energetic, enthusiastic and interested in the class. • Be aware of students' preferences for learning by asking them and vary teaching strategies where appropriate in the class to meet the learning needs of students. • Address the learning outcomes and objectives of the class and the students' expectations at the start of the class. • Demonstrate knowledge of the main points in the class.	• Determine and allow enough time for the lecture presentation to include enough time for feedback and discussion. • Incorporate a change of pace activity every twenty minutes in order to stimulate and hold the student's interest and attention. • Observe students verbal and non-verbal communication to gauge their interest and attention levels. • Build on student's responses and add your own thoughts and knowledge. • Clarify any confusing issues and address any gaps in knowledge. • Where appropriate, provide clinical input or personal anecdotes to enhance the relevance of the topic under discussion.	• Students remain up to date and additional reading will aid further learning and consolidate learning from class. • Students will recall and retain information for longer periods of time. • Students' attention during class may be maintained if a lecture is not rushed or left unfinished. • Evaluations will help the novice educator to plan the next class accordingly and make appropriate improvements or adapt teaching strategies to meet the learning needs of the students.

	• Provide relevant up-to-date information, evidence and resources. • Be familiar with the most recent literature and policies in relation to the specific topic. • The educator must have command of specific skills such as listening, responding, questioning, and higher order questions. • Ensure to leave adequate time to summarise the class, as this is essential to draw the lecture to a close. • Anticipate any unexpected difficulties and plan ahead with strategies to deal with them, for example,	• Provide students with additional reading lists and references and links to content where appropriate. • Refer to the ground rules agreed at the start of class if you encounter any difficulties or challenges with students within the class e.g., if a student is being disrespectful of others' opinions in the class or if a student is on their mobile phone in class. • Observe any cues suggesting restlessness or boredom such as wiggling in seats, tapping feet and yawning and use these signs to guide the class. If everyone in the group is falling asleep it may be time to end the discussion or take a quick comfort break. • Identify any shifts in mood, attitudes and participation/engagement in class.	

	problems with technology, and difficulties with presentation such as running out of time. • Manage class time effectively. • Evaluate the session and plan for the next session.	• Vary teaching methods to engage and motivate students that are unmotivated and poorly engaging in the class. • If a student is not engaged in class, follow up with them after the class to explore what the issue was to gain a better understanding of how the issue could be resolved in the future and how the student could be best supported in their learning. • Preventative measures to deal with technological problems with equipment include a good understanding of the technology, back up equipment to hand such as handouts and a printed version of presentation with enlarged slides. • Evaluate performance and student learning through self, peer and student feedback to maintain a high standard of teaching.	

		• Peer and student evaluations can be completed online via mobile phones using the exit ticket function on Socrative or through manual evaluation handouts. • Self-evaluation of the class can be done effectively through recording the performance in class. View the recording with a friend or colleague and establish goals for improvement in the future.	