Title: Does 'Silence' have a place in Higher Education? Exploring the effectiveness of 'positive silence' as an instrument of pedagogy; An Action Research Project

Abstract: Conceptually, silence has been widely accepted as an inherently useful tool. In instances of public speaking, it can be used to build anticipation, emphasise a particular point and even to enhance the atmosphere of delivery. Yet, in education there is a long history of its utilisation carrying negative connotations. This action research project challenges this long-standing adversarial predisposition and, in line with recent literature, evidences its strength as a pedagogical technique for enhancing student cognition, prompting active learning, and facilitating deeper engagement.

Key Words: Pedagogy, Positive Silence, Oppressive Silence, Multiple Intelligence Theory, Active and Deep Learning

Introduction

The premise of the research project at hand is one of interesting consequence. It advocates for the evaluation of an academic's professional learning through the unification of theory and practice together; "praxis", culminating in a bout of 'practice-based research' (Mcniff, 2015); an 'active inquiry'.

In this instance, we aim to illustrate how useful the concept of 'silence' can be when utilised as a pedagogical instrument for enhancing a student's cognitive development. With this objective in mind, various research questions surface:

- a) Does 'silence' enhance student learning?
- b) How effective is 'silence' at minimising passive learning?
- c) How do students perceive 'silence' in the classroom?
- d) Can the learning experience be hampered through the utilisation of 'silence'?
- e) Should 'silence' form an integral part of a mixed method learning approach?

Even though the list of research questions, one could pose, is relatively inexhaustive, this submission will nonetheless attempt to provide answers to the above. However, before delving into the crux of this action research project, it is imperative that the dual elements of 'context' and 'positionality' be explored initially.

1.1 Context

In this instance, the inquiry is taking place at a UK University, during the LLB Honours program core module, Equity & Trusts. It is crucial to stipulate that Equity & Trusts is a difficult subject and contains some of the most convoluted instances of law explored during the program. Consequently, avoiding 'cognitive overload' was a main focus, thusly attempting to circumvent a scenario where students became overloaded and disengaged (Marshall, 2020) with the complicated material, exacerbating the difficulty level attributed to its already naturally amplified complexity.

Accordingly, to attain the desired aforementioned result, reflecting on the teaching and learning process was of paramount importance. Quick to leave the 'one-size-fits all' educational theorem at the wayside, recognising its application as outdated (Solis, 2017) in relation to content delivery and incompatible with multiple intelligence theory (Gardner & Hatch, 1990), I opted for a flexible pedagogical approach. I mirrored Isecke's (2011) suggestion that the 'needs of students be assessed on a continuous basis with subsequent adjustments to teaching practises being implemented, pending reflection'. Benchmarks for the aforementioned reoccurring assessment were gleaned from the three core principles comprising the Inclusive Curriculum Framework (ICF), reflected in Barnett and Coate's (2005) work; accessibility, identification and mental wealth (employability).

With the first pillar, we make reference to conceptual accessibility (Marshall, 2020), which I achieve by translating complex legal terminology into laymen terms and parallelising it with everyday concepts. The latter two pillars were explored in tandem, due to conceptual similarities. Considering the niche nature of this particular legal topic, only a significant minority, if any at all, will choose to specialise in Equity & Trusts professionally. Nonetheless, through the use of examples, scenarios and conceptual similes, I attempted to assist students in developing bonds with the module subject matter by unearthing reflective elements. Thusly,

even if they choose not to practice this area of law, the analytical skills garnered from the learning process should not only have facilitated deep and active learning but would also emphasise the importance of the development of a wider array of analytical skills, core to the legal profession. The module effectively transitions from a 'specialised, conceptually difficult and mandatory subject' to a 'forward thinking, balanced educational experience'.

1.2 Positionality

It is important to appreciate that the second element of 'positionality' rarely falls neatly within a particular category (Herr, 2012). To that effect, I have identified two positionalities that could define the approach to this project: 'Insider Positionality' and 'Insider/Outsider Positionality'. While the former has been identified as significantly more relevant than the latter, for the sake of transparency, it would be prudent to succinctly illustrate both.

The latter, being the lesser of the two possibilities, briefly suggests that due to my formal training as a member of the legal profession I may hold specialist knowledge (Herr, 2012), thusly operating as an outsider to the field of education while maintaining my insider status as a lecturer. However, it is submitted that despite a small overlap, my positionality in this context skews almost exclusively to that of the insider, and specifically that of a practitioner researcher studying the outcome of an action rather than my own professional self, "an important conceptual distinction" (Herr, 2012). This is evidenced by the premise of this research project. On another note, considering existing awareness of my potential dual positionality, it became possible to avoid a common pitfall associated with insider practitioner researcher positionality, namely considering myself "an outside observer rather than an insider committed to the success of the actions under the study" (Herr, 2012).

Action Research

Before we proceed to the details of the intervention, it is necessary to dictate the parameters associated with Action Research Projects, to cultivate a lucid and detailed understanding of the framework within which we will be conducting our inquiries.

We define action research in a similar fashion to Kurt Lewin. Albeit we do so under the additional qualifying moniker of Carr and Kemmis's (1986) view; as a self-reflective inquiry undertaken by the researcher with the primary ambitions of understanding the context of their practices, the rationality behind their implementation and how to best enhance them in a practical sense. In effect, its modus operandi is reflected in the dual elements that comprise its name:

- (a) 'Action' what is being done in a particular context (in this instance higher education) and
- (b) 'Research' discovering the relevant actions for that context and unearthing ways to improve them. (McNiff, 2016)

Working in tandem and accepting the aforementioned elements as interlinked, the end result would be a form of real-world research generating new ways of improving learning (McNiff, 2016). However, to accurately state that one has contributed to the improvement of social practices and circumstances through action research, and not just engaged in action learning or professional education, they would have to have engaged in a specific process of:

- (i) observation,
- (ii) reflection,
- (iii) practice monitoring and data gathering and
- (iv) testing the provisional claims of knowledge.

The inquiry explored will follow this general structure. Furthermore, I stipulate that I use O'Leary's (2004) specific cycle of research model. Its emphasis on reflection, in addition to advocating for an initial observation, correlates effectively with my overall methodology and data collection methods. These combined elements should allow for greater explanatory adequacy, by virtue of generating evidence to test the validity of the research aims, thus allowing the results to withstand robust critique (McNiff, 2016).

2.1 Intervention

The premise of utilising silence is deeply intriguing, partially due to the underlying implication that learning environments are strongly linked to talking, thusly suggesting that silence is of negative consequence (Ollin, 2008), adversarial to active learning and equated to non-participation (Tribe, et al, 2023). Resulting, to ascertain the validity of this premise the intervention in this instance will be dual pronged in its implementation.

The first planned application involves the introduction of 'organised independent study' segments during seminars. Over the course of these segments, lasting approximately ten minutes, the students will be asked to engage in problem question analysis, with a strict focus on identifying clues that will form the foundation of their legal arguments. They will embark on this exercise without my initial intervention, with the aim of having the learners engage in critical thought, shifting the emphasis from simply needing to know or find the correct legal premise quickly to the importance of mastering appropriate analytical skills. The usefulness of such an approach was affirmed by Alexandra Fidyk (2013) who suggests that planned opportunities for silence may result in a fertile, reflective and creative learning environment.

Building upon this premise, the second element of the intervention is to utilise silence in an impromptu fashion, where necessary, to generate engagement. Such a technique, typically found in the form of pauses after questions and during discussions, has been characterised as 'positive silence' (Tribe, et al, 2023). In essence, where a student is lacking the relevant knowledge, to provide an appropriate answer to a formative assessment, instead of rushing to fill the void with semi-relevant facts, rather they will be encouraged to take a step back and review the materials associated with the posed query. Consequently, even if they are unable to identify the correct answer, post the impromptu silence, not only would they have critically engaged with the material but, as an instructor, my interaction with my students may now transcend the action of simply providing the correct answer and encompass analysing the appropriate methods of arriving at it, by critically evaluating gaps in their analytical skills. However, there is a caveat. Specifically, proper utilisation of this technique requires familiarity with one's students, so that the positionality of this silence is better understood (Tribe, et al, 2023).

The reason for this dual approach is partially rooted in recognising that conceptually 'silence' can be perceived negatively, occasionally having been used as an oppressive tool of discipline, signalling out individuals for their non-participation (Clarke, et al, 2021). However, the fashion in which it was implemented during the interventions has been identified as distinctly different in so far as being participatory, agentic and a positive pedagogical practice (Tribe, et al, 2023).

As a result, I chose to lead with the structured periods of silence, with the subsequent implementation of similar impromptu elements, in order to demonstrate that their goal was virtually identical; having them actively engage with legal analysis, thus alleviating feelings of anxiety, awkwardness and embarrassment and dissociating it from former negative experiences as a passive, non-participatory state (Tribe, et al, 2023).

2.2 Methodology & Data Collection

I sought to investigate whether 'silence', either structured or impromptu, can operate as an effective tool in higher education, encouraging active learning. In order to realistically answer the ensuing hypotheses, as outlined in the introductory segment of this paper, a mixed methodological approach, both qualitative and quantitative, was warranted.

In conducting my literature review, it quickly became apparent that there are limited publications on the positive implementation of 'silence' in educational settings, due to it largely being overlooked in secondary education (Hanna, 2021). However, in the last two years there has been an uptick in detailed research being conducted, involving the use of 'silence' in pedagogy, as noted from Tribe's et al (2023) journal submission, among others, that espouse its strength in classroom education (Bao, 2020). Yet, literature still remains relatively sparse. Thusly, I considered it prudent to expand my review to include older submissions like Ollin's 'silent pedagogy' (2008), even if they may be viewed as dated by current standards (Hanna, 2021). While analysed with a degree of scepticism, they can still serve as evidence, promoting the importance of 'silence' in the pedagogical landscape, and context upon which a foundational approach can be built, sidestepping early misconceptions about active learning being exclusively tied to verbal participation.

Resulting, and to inform this research project, I carried out six separate teaching observations, which although can serve as both quantitative and qualitative studies in an educational setting (Kawulich, 2012), operate in a qualitative capacity in this instance. Specifically, their purpose was to assist in forming a contextual backdrop, as a method of triangulating and illuminating data (Hanna, 2021), verifying the findings gleaned from a second source of data (Kawulich, 2012). In a similar vein to Hanna's (2021) approach to observations, I initiated the process with the conscious choice of not overly focusing on what I wanted to observe but rather on facts that would culminate into a clear picture of how the teaching and learning processes were functioning, during periods of silence and vocal interaction i.e.

- (a) how well students were prepared,
- (b) how engaged were they with the formative assessments,
- (c) did engagement grow through the use of silence,
- (d) was there any noticeable disengagement during periods of silent study.

In order to maximise this research technique, I conducted observations as an 'overt observer as participant'. A rational choice, not only because of the setting, it also suggested to yield a better understanding of what is being observed, encouraging participants to be more open with their responses and better in line with ethics (Kawulich, 2012).

The second data collection technique is that of a survey, which operates as a mixed-method approach combining both quantitative (close-ended) and qualitative questions, encouraging a more detailed expression of a student's views (Taherdoost, 2021). There are multiple advantages associated with this method, such as yielding accurate data and allowing for a more

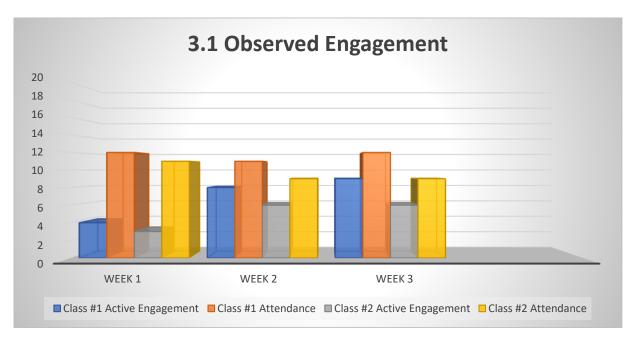
objective and scientific analysis. Furthermore, when coupled with context from observations, it is possible to minimise the impact of the common drawbacks that manifest in the form of reliability, a low response rate and misunderstanding of the questions (Taherdoost, 2021). Lastly, to ensure the accuracy of the results the target groups were provided with a short explanation of the concept of 'silence', including background and meaning (Taherdoost, 2021), a further 'drawback pre-emptive measure'.

In accordance with the rules of the British Educational Research Association (BERA), ethical considerations including but not limited to consent, transparency, right to withdraw, privacy and data storage were appropriately observed during primary data collection.

Results & Evaluation

Aiding my evaluation of this branch of data, I employ Braun and Clarke's (2012) thematic analysis. I begin with this project's adopted definition of silence, defined 'as a period of reflective contemplation either organised or spontaneous typically occurring after questions and during discussions' ('positive silence') (Tribe, et al, 2023). With this definition in mind, we now proceed to explore its relevance as a practice during two separate cohorts: class #1 and class #2.

To appreciate the context of the observational information, we first need to qualify what 'active engagement' entails. Specifically, it is recognised as effective demonstrations of deep learning: 'participation in class formative assessments through vocal analysis of the material, submitting a lucid query with follow-up, independently scanning their notes (live research) and/or engaging in class discussions'. The observational element of this study was conducted over a three-week period, where a common trait between weeks was that all material was represented in some form in the summative assessment ensuring that, from a student's perspective, the learned material had an equal amount of merit in its short-term relevance and application.



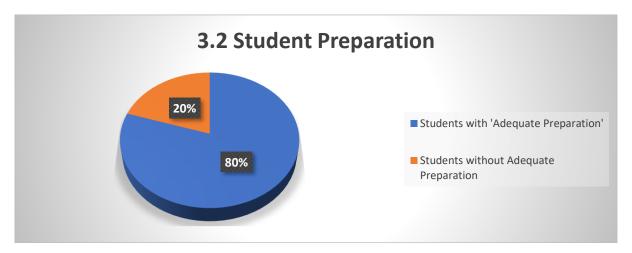
Graph 3.1 provides some insight into the effectiveness of the learning journey that took place during the 'observation period' and seeks to establish context as to the varying levels of deep learning witnessed. Firstly, despite attendance being relatively even for both cohorts over the

three-week period, albeit with minor fluctuations, what we defined as 'active engagement' increased dramatically in latter observations. The stark contrast in the number of students actively participating in the learning process between week 1 when compared to weeks 2 and 3 can be attributed to the use of 'silence' as a pedagogical instrument. Specifically, in week 1 there was underutilisation of the associated techniques, both organised and impromptu, whereas in subsequent weeks 'positive silence' was effectively utilised.

As iterated above, the results from the observations seem to suggest that the utilisation of 'silence' increased the number of students that actively engaged with the lesson material during a live setting. In turn, this gleaned contextual backdrop espouses its relevance as a tool in pedagogy, potentially allowing it to operate as a crucial part of a mixed-method approach to teaching and seamlessly addressing Gardner and Hatch's (1990) multiple intelligence theory on learning. These observed results were later affirmed by the majority of students that opted to take part in the questionnaire and elected to give answers to the final qualitative question. Specifically, 80% of the survey participants (4/5 students with 1/5 electing not to provide an answer) preferred this mixed-methodological approach, combining 'positive silence' with traditional teaching methods, suggesting that it struck a good balance regarding content delivery and facilitating better comprehension of the material. One student in particular opted to clarify their position further, stating:

"Silent study is good to get you thinking and come up with your own answer. I prefer any learning that is flexible as sometimes time is not my best friend".

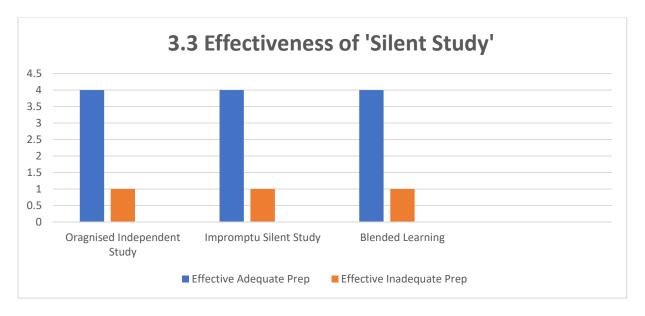
While a singular detailed response, its poignancy sheds further light onto the potential positive aspects associated with silent study. Specifically, an emerging thread from the thematic analysis is one of knowledge and in some instances the absence of it. In effect, when 'positive silence' was used, learners who did not know the answer to a particular question had time to reflect on the module material and actively engage in a search to unearth it. In turn, this would denote that while knowing the correct answer may be important, the absence of this knowledge during a formative assessment need not necessarily be viewed as a besmirching element regarding student preparation. Instead, it is an opportunity that allows for flexible learning, creating an environment that, although succinct in terms of time, can exponentially boost a student's organisation, comprehension and research skills.



These qualitative results were subsequently validated by quantitative data arising from the 'close-ended questions' contained within the questionnaire. The first survey question reaffirms the 'knowledge theme' derived from the thematic analysis above, indicating that some students

do attend the seminars without a basic understanding of the material being covered (*graph 3.2*). Making and confirming this distinction early on is important because it allows us to gauge the potential limitations of 'silence' as a pedagogical tool during the intervention.

However, responses to survey questions 2, 3 and 4 asking students about the effectiveness of the seminar as a learning environment and whether or not 'silent study' (organised and/or impromptu) had a positive influence on their learning, were all unanimous in their affirmation of the helpful nature of the practice. Therefore, irrespective of the extent of a student's preparation for the seminar, the interventions (as defined in section 2.1) were shown to be helpful in the learning process. Question 5 from the survey qualifies this even further, feeding back into the knowledge thread from the thematic analysis, as students unanimously indicated that the periods of 'impromptu silent study' did in fact hone their critical thinking and analytical skills, even if they did not find the answer. This suggests that the benefits are derived from the contemplative and reflective nature of the 'silent' process rather than from any answers or lack thereof arising during the practice (graph 3.3).



An understanding emerged that the positive outcomes were not derivative just from the utilisation of 'silence' but also from its careful definition and controlled application. Both the quantitative and qualitative results from the intervention affirm the strength of 'silence' as an educational tool, suggesting that in order to improve future teaching practice, refinement of its implementation, in both an organised and impromptu fashion, needs to be further explored.

Conclusion

With the understanding that the term 'silence', throughout this intervention, is effectively defined by Tribe's (2023) 'positive silent study' we have successfully created a benchmark indicating what characteristics may constitute it as effective practice; participatory, agentic, reflective, and constructive. In turn, this project has prevailed in poignantly answering the research questions from the introductory segment. Specifically, both the qualitative and quantitative data suggests that 'silence' enhances classroom learning, minimises passive learning and is perceived favourably by students to such an extent, that the option of having it operate as a genuine technique in mixed-method teaching is received positively.

Furthermore, the action research process was particularly helpful in facilitating the creation of a contextual backdrop. Achieved through the utilisation of thematic analysis (Braun and Clarke, 2012), I was effectively able to pre-emptively minimise any perceived negative effects that may have arisen, if my understanding and definition of silence in education were improperly constituted. This would have generated a domino effect of a vague action research premise, inaccurate data and potentially misguided approaches to pedagogy. Essentially, we can conclude that 'silence' is somewhat of a double-edged sword. Proper use will yield significant positive results, while utilisation rooted in misunderstanding or improper techniques may either be ineffective or serve as a potential catalyst for passive learning.

Bibliography

Bao Dat, (2020), 'Exploring How Silence Communicates', English Language Teaching Educational Journal (ELTEJ) Vol. 3 | E-ISSN: 2621-6485

Barnette Ronald and Coate Kelly, (2005), 'Engaging the Curriculum in Higher Education', Berkshire: Open University Press

Braun Virginia and Clarke Victoria, (2012), 'Thematic Analysis' Chapter from 'APA Handbook of Research Methods in Psychology'

British Educational Research Association (BERA), (2018), 'Ethical Guidelines for Educational Research', Fourth Edition, UK: BERA

Carr Wilfred and Kemmis Stephen, (1986), 'Becoming Critical: Education, Knowledge and Action Research', London: Routledge

Clarke Matthew, Lyon Haines Charlotte, Walker Emma, Walz Linda, Collet-Sabe Jordi and Pritchard Kate, (2021), 'The Banality of Education Policy; Discipline as Extensive Evil in the Neoliberal Era', Sage Journals

Elliot John, (1991), 'Action Research for Educational Change', Milton Keyes – Philadelphia: Open University Press

Entwistle Noel, (1997), 'Phenomenography in Higher Education', University of Edinburgh: Centre for Research of Learning and Instruction | Link: 10.1080/0729436970160202 (Accessed 01/05/2023)

Fidyk Alexandra, (2013), 'Attuned to Silence: A Pedagogy of Presence' Chapter 9 of 'Silence, Feminism, Power', London: Palgrave Macmillan

Gardner Howard and Hatch Thomas, (1990), 'Multiple Intelligences go to School: Educational Implications of the Theory of Multiple Intelligences', CTE Technical Report Issue No. 4, Harvard University: Education Development Center Inc. | Link: http://cct2.edc.org/ccthome/reports/tr4.html (last accessed 01/05/2023)

Hanna Amy, (2021), 'Silence at School: Uses of Experiences of Silence in Pedagogy at a Secondary School', British Educational Research Journal Vo. 47 | Link: https://doi.org/10.1002/berj.37

Herr Kathryn, Anderson L. Gary, (2012), 'The Action Research Dissertation: A Guide for Students and Faculty', Thousand Oaks (CA): SAGE Publications ltd. | Link: https://doi.org/10.4135/9781452226644

Hockings Christine, (2010), 'Inclusive Learning and Teaching in Higher Education: A Synthesis of Research', Available at: https://www.advance-he.ac.uk/knowledge-hub/inclusive-learning-and-teaching-higher-education-synthesis-research (last accessed 01/05/2023)

Isecke Harriet, (2011), 'Backwards Planning – Building Enduring Understanding through Instructional Design', CA: Shell Educational Publishing | ISBN: 978-1-4258-0633-0

Kawulich Barbara, (2012), 'Collecting Data Through Observation' chapter from 'Doing Social Research: A Global Context', USA: McGraw Hill

Kemmis Stephen and McTaggart Robin, (2000), 'Participatory Action Research', CA: SAGE Publications ltd.

Marshall Stephanie, (2020), 'A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice', Fifth Edition, New York: Routledge

Marton Ference, (1981), 'Phenomenography — Describing Conceptions of the World Around Us', Department of Education — University of Goteborg (Sweden), Link: https://doi.org/10.1007/BF00132516 (accessed 01/05/2023)

McNiff Jean, (2016), 'Writing Up Your Action Research Project', New York: Routledge | ISBN: 978-1-315-73489-9

O'Leary Zina, (2004), 'The Essential Guide to Doing Research', CA: SAGE Publications Ltd.

Ollin Ros, (2008), 'Silent Pedagogy and Rethinking Classroom Practice: Structuring Teaching Through Silence Rather than Talk', Cambridge Journal of Education

Pritchard Alan, (2014), 'Ways of Learning - Learning Theories and Learning Styles in the Classroom', Third Edition, New York: Routledge | ISBN: 978-1-315-85208-9

Solis J. Oscar, Kincade H. Doris and Turner D. Windi, (2017), 'Differentiating Instruction for Large Classes in Higher Education', International Journal of Teaching and Learning in Higher Education | ISSN: 1812-9129 | Link: https://files.eric.ed.gov/fulltext/EJ1151047.pdf

Taherdoost Hamed, (2021), 'Data Collection Methods and Tools for Research; A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Projects', International Journal of Academic Research in Management (IJARM) Vol. 10

Tribe Robert, Wood Margaret and Su Feng, (2023), 'Re-conceptualising silence as a positive pedagogical approach in schools', Sage Journals | Link: https://doi.org/10.1177/00345237231152604

Velez Gabriel, Power A. Seamus, (2020), 'Teaching Students How to Think, not What to Think: Pedagogy and Political Psychology', Journal of Social and Political Psychology