HIGHER EDUCATION RE-IMAGINED, TO SUPPORT TEACHERS AND STUDENTS. AN EXPLORATION OF AN INNOVATIVE, FIT FOR PURPOSE PEDAGOGY

C. Mazzola
Lancaster University (UNITED KINGDOM)
Blackpool and the Fylde College (UNITED KINGDOM)

Abstract
The classroom can be a ponderous and complicated place and teaching staff typically use their previous learning experiences as an example to build their own identity and pedagogical approach.

Teaching higher education is a duel between equipping students with the breadth of subject specific knowledge and building the desirable ‘graduate’ skills expected for the workforce of the 21st Century. These approaches should include a student-centric and reflective approach to enable students to become producers of knowledge.

The autoethnographic reflective narratives are separated into silos to effectively answer the research questions. My first narrative is based upon my secondary school education from 1994 to 1999, the second narrative is based upon my return to study 10 years later in 2009, and this data will attempt to explore how my previous learning experiences affect my pedagogical practice.

The final reflective accounts, span from the time I have been employed in Computing at Blackpool and the Fylde College from 2013 to the present day, in order to explore what factors motivate me to change my pedagogical practice and prepare students with ‘graduate’ skills for the workforce of the 21st Century.

The analysis of the reflective narratives identified that a co-collaborative approach enables students to take ownership of their learning, in addition the students shared the responsibility of teaching in a ritualised community of practice.

Keywords: adaptability, flexible-pedagogy, co-collaboration, inclusive, autoethnographic.

1 INTRODUCTION
“The secret of change is to focus all of your energy not on fighting the old, but on building the new” (Socrates, as cited in Millman, 2006).

The need for a student centric classroom is essential [5] [2] to build knowledge and prepare students with ‘graduate’ skills for the workforce of the 21st Century [1] [4].

There are inconsistencies in the literature regarding the implementation of a student centric classroom. Teachers must be confident in their professional abilities and pedagogical approaches [30] to ensure that students receive effective learning.

A novice teacher may use their previous positive and negative experiences to assist them in the construction of their professional identity. Until they have a firm grasp on their own identity, it could lead to feelings of insecurity, anxiety, and feelings of loneliness.

The autoethnographic reflective narratives are separated into silos, to effectively answer the research questions. My first narrative is based upon my secondary school education from 1994 to1999, the second narrative is based upon my return to study 10 years later in 2009 and this data will attempt to explore, how my previous learning experiences affect my pedagogical practice.

The final reflective accounts span from the time I have been employed in Computing at Blackpool and the Fylde College from 2013 to the present day, in order to explore what factors motivate me to change my pedagogical practice and prepare students with ‘graduate’ skills for the workforce of the 21st Century.
Key themes and gaps in the literature are (1) Impact of previous learning experiences [5] [2]. (2) Development of pedagogy in higher education. (3) Experiencing unpredictable graduate Jobs [1]. (4) Building graduate ‘Human’ skills, [1] [4].

RQ1: How does my previous learning experience affect my pedagogical practice?

RQ2: What factors motivate me to change my pedagogical practice and prepare students with ‘graduate’ skills for the workforce of the 21st Century?

2 LITERATURE REVIEW

To ensure continuity of this review, the aims of the research are organised using the following structure, (1) Impact of previous learning experiences, (2) development of pedagogy in higher education, (3) experiencing unpredictable graduate Jobs and (4) building graduate ‘Human’ skills.

2.1 Impact of Previous learning Experiences

The literature indicates that a student’s prior learning experience could impact their study approaches in the future [31] [30] for example if a student thinks of learning as a reproduction of information, this could elicit a surface approach, meaning they will not fully understand the topic. However, a collaborative approach is emphasised as an advantage, as the students could share ideas, opinions, concepts, widen their perspectives, develop teamwork, and absorb information effectively [31] [29].

An empathetic teacher could encourage the students to grow socially, intellectually and emotionally [13]. “A person who is academically unconfident is unlikely to easily become an autonomous learner, and learner confidence correlates well with academic success” [16].

2.2 Development of pedagogy in Higher Education

The classroom can be a ponderous and complicated place [30] the question of suitable pedagogy in higher education is itself contested [10] [16] and it is hypothesised that didactic traditional-transmissive pedagogical approach of teaching in higher education is even more superfluous, as students are not constructing the knowledge, they are simply receiving it [5] [2]. The literature argues that these are extreme viewpoints and that a lecturer’s true purpose is to engineer effective learning activities and environments for the students, which will help engage them with their learning. Therefore, it is recognised that this cannot be achieved formulaically; by following a prescribed pathway. Instead, lecturers need to constantly use their professional judgement and adapt to circumstances [16] [9] [28].

“There is abundant evidence that the most effective higher education environments are ones in which students are diligently involved as part of a community of learners” [10].

Creating a community in the classroom is typically the responsibility of the lecturer, adapting their pedagogy to fit the student’s needs. Creating a collaborative and inclusive environment is a challenge however there is evidence from Kings College and Newcastle College who include the ‘students as fellows’ scheme, based on John Lea’s students as producer’s framework [5]. The fellowship enables students to create a ritualised community of practice and become co-teachers and active collaborators, essentially working together to develop learning [11] [16].

Using this co-collaborative approach inside the classroom, could change the roles of teachers and students. It is suggested that one of the key reasons for developing a co-collaborative approach, is a belief that students should be active participants in the learning process, rather than passive learners; and partnership is key to developing participation and building student engagement [12]. Changing to this co-collaborative approach could enable students to build confidence and develop skills, ‘Human’ skills that are anticipated in the fourth industrial revolution [10].

Scholars have identified that active learning is a successful pedagogical approach to engage students in their learning. The overarching definition is that if students are participating in meaningful learning opportunities, it allows them to explore a nature of enquiry and think creatively to solve a problem, provide them with complex critical thinking opportunities, and a powerful environment that fosters enhanced communication (Hutching, 2006). Using a co-collaborative approach engages in active learning with activities such as paired activities, informal small groups, and cooperative student projects [14].
This creative fusion and development of active learning and a co-collaborative approach could produce active collaborators and co-teachers. There is however a legitimate need for teaching staff to specify areas of the curriculum that need to be discovered, however, the creation of active collaborators and co-teachers could enable the teacher to create a ritualised community within the classroom environment, creating rich student-to-student dialog, active participation and a shared ownership of the learning [5] Krych et al, 2005; [2] [3] [4]. It could be suggesting that this approach creates a café style pedagogy and encourages social interaction [19].

Scholars posit that the introduction of a flexible pedagogy could reshape the classroom environment, reshape the activities completed and the leadership style of the classroom [27]. The flexible pedagogy framework introduces six pedagogical ideas. (1) Learner empowerment, (2) future-faced education, (3) decolonising education, (4) transformative capabilities, (5) crossing boundaries and (6) Social Learning.

(1)  The idea of ‘learner empowerment’ challenges the interaction between students and staff, resulting in the learning being reshaped. The concept of ‘co-creation’ is encouraged and learning becomes active as opposed to static and transmissive [5]

(2)  The second idea, ‘future-faced education’ indicates that this style of pedagogy encourages the development of the desired skillset that is needed for industry in the 21st Century [1] Hurley, 2005).

(3)  The third idea, ‘decolonising education’ indicates that flexible learning creates an inclusive community, where students can confidently address and appreciate diverse cultures [15].

(4)  The fourth idea, ‘transformative capabilities’, implies that learning is focused on the ‘whole person’ and embeds lifelong learning [6].

(5)  Idea five is ‘crossing boundaries’, which attempts to maximise collaboration and explore different environments and perspectives to provide students with valuable experiences that they can use in industry [1].

(6)  The sixth idea is ‘social learning’ and encourages collaborative interactions and active learning ideas. Socialisation of the classroom is key for enhanced participation and learning spaces should encourage social relationships. [14] [10].

2.3 Experiencing unpredictable graduate jobs

There is significant research around the theme ‘future of work’, and what work might look like in the future. There is evidence that the fourth industrial revolution brings opportunities and limitations for the future workforce [1]/

The debate includes technological breakthroughs which are said to be rapidly changing the tasks performed by humans and those produced by machines. There is evidence to suggest that before 2022 there is a clear demand for roles in “Data Analysis, and Scientists, Software and Applications Developers, and Ecommerce and Social Media Specialists, roles that are significantly based on and enhanced by the use of technology” [1]. Therefore, there is a need to develop students to become experts in their field, to ensure their sustainably in the future work place.

2.4 Building graduate (human) skills

Alongside student becoming expert in their academic field, there is a suggestion that curriculum planning should support students to demonstrate and excel in their technical ability and possess ‘human’ skills. The term ‘human’ skills are a formulation of what has previously been stated as transferable skills, soft skills, personality skills or personal skills [1] [6] Examples of Human skills as identified by research are: creativity, originality and initiative, critical thinking, persuasion, negotiation, resilience, flexibility, complex problem-solving, emotional intelligence, leadership and social influence [1] [4]. The explicit implication here is the added pressure for teaching staff to not just incorporate these ‘human’ skills alongside the complex curriculum but to embed them to develop lifelong learning.

There is evidence that some teaching staff in higher education have shared perceptions that their current workloads are unmanageable, and this pressure is turning many professional teachers off teaching all together [7] Benade, 2016; [8]. It could be suggested that there is a need to lessen the workload for teachers and create an environment that shares the responsibilities of learning.
3 METHODOLOGY

3.1 Autoethnography

To investigate the problem and answer the research questions this study used Autoethnography as a methodological approach. Autoethnography is seen as modernistic and a qualitative narrative of inquiry [17], [18]. Autoethnography could enable a deeper understanding of a person’s philosophies and could empower skilful decisions and better one’s practice [20] [19]. Therefore, Autoethnography is a suitable approach to this study, as this idiosyncratic discovery [22] will enable me to recollect memories and emotions that relate to the research questions and decipher the impact it has had upon my personal journey.

3.2 Data Collection and Analysis

Data was collected in the form of written personal reflections, recollecting memories from my past secondary school education, my undergraduate education and finally, moments of my teaching. I used a reflective cycle in order to accurately reflect the events and connect to the feelings and emotions that were present at the time [21].

3.3 Personal Narratives

I wrote several personal narratives over the space of two months; these were split into isolated silos, past and present, which helped organise my own thought processes. The past narratives include episodes from my secondary school education between 1994 to 1999. The second narrative reflects upon my return to study 10 years later in 2009. The final reflective accounts, spans from the time I have been employed in Computing at Blackpool and the Fylde College, I started out as a lecturer in 2013, then progressed to programme leader in 2015 and now I am a Senior Tutor for learning and teaching.

3.4 Data Analysis

The isolated personal narratives were written with the aim of eliciting the positives and negatives of the learning experiences, and in order to analyse the research questions. The narratives were handwritten, and I used thematic analysis to identify themes and patterns in the narratives [18] [19], Coding was performed repeatedly, using highlights to help, group, and organise the themes.

3.5 Validity

To address the validity of my personal narratives, I spoke with my close family and academic colleagues to ensure that my reflections were accurate. When completing the thematic analysis, the narratives were shared with three colleagues at the institution that I am employed, and they were independently coded and group. Once these were complete a professional discussion took place to discuss the findings, the discussion outlined particular strengths and weaknesses in my narratives, and this enabled me to re-work my narratives to reflect a true and accurate account. This ensured that the codes were accurate and true. With the narratives being cross checked, this made me aware of the effects it could have on members whom may appear in the study, therefore the narratives language used was checked to ensure no harm came to any participants [22].

There are limitations to using personal reflection, particularly the shaping of and the selective nature of memories, shaping them to address an issue and it is said that truths could be elaborate to lure in the reader [22]. However, on a positive note, it could also uncover taken for granted moments or unconscious memories [24] [25].

4 FINDINGS

The findings are split into three stages, (1) secondary education (1993 – 1999), (2) Undergraduate education (2009 – 2013) and (3) Work/As teacher 2013 – 2019. These sections are supported by quotes from the narratives.
4.1 Secondary school education (1993 – 1999)

Drawing on my past educational experiences from school, (1994 to 1999) it could be suggested that the educational schooling system was not fit for purpose.

“I always felt that I was too slow, the teachers projected the work and we were to copy it down”.

Within the reflective account, I noted that my schooling affected my confidence in my own ability, as the lessons were simply transcribing information from a whiteboard, which was pre-populated before a lesson. I further detail that this did not help me learn and the overall impact affected my grades in my final GCSEs.

“I felt that I was too slow, and I had to rush to copy the work down. I did not learn anything and did not achieve good grades”.

This particular schooling experience could be seen as a negative experience and one that did not consider the student in terms of emotional or academic support. It appears that the learning did not encourage participation.

“I felt challenged, as I had to listen to hours of lectures. I felt detached as I could not keep up. I dreaded the teacher asking me question as I was mostly disengaged”

4.2 Undergraduate Education (2009-2013)

It must be noted that in 2008 I had a daughter, and this changed my perspectives and enhanced my motivations. I wanted to have a career that my daughter would be proud of and become a positive role model in her life; this is evident in my reflections “I was motivated and wanted to achieve”.

However, the effects of my schooling had left a lasting effect on me as I felt anxious and unconfident in my abilities and hoped that it was different from secondary school. Nonetheless I had newfound motivation from my daughter and that kept me focused and resilient.

“I did not want the same experience as I did in school therefore, I decided to record all the lectures and listen to them at home in my own time and pace. This was time consuming and exhausting but I was motivated and wanted to achieve”.


A film that I have always enjoyed is Mary Poppins, more specifically a quote that stuck with me and I can relate to in all aspects of my life “In every job that must be done, there is an element of fun. You find the fun and -SNAP- the job’s a game” [26].

This section includes specific narratives that pushed me out of my comfort zone in term of teaching, to ensure that the students received the most appropriate and engaging learning sessions.

In one particular session, I confidently decided that I needed to switch up my delivery and take a risk, I introduced a new approach to question the students’ knowledge, and this was in the form of a Kahoot Quiz. This created a positive and engaging atmosphere; the reflections note a ‘well humored rivalry’ between the students and this created an open discussion. I used encouragement and praise to motivate the students.

In 2018 I was becoming more confident and I decided that if I can learn from stepping out of my comfort zones, the students might also learn, so I decided to take another risk; to my surprise the students participated and it was a success.

I had noticed that a particular cohort had struggled with a specific part of academic writing, so I shared my own personal struggles and experiences with the students and then asked the students to step out of their comfort zones to try a new technique to see if it helped.

“I asked the students to not use a computer for the session, some confused looks, we huddled around a table in the middle and began a discussion on paraphrasing a nursery rhyme (the students thought I had gone mad)”

The discussion was open, and all the students participated, I used direct questioning techniques to elicit deeper thoughts and the students demonstrated a deeper and more critical discussion.
“The students stated that they enjoyed the session and I felt an incredible sense of achievement”

The final findings are documented in three parts over the course of a level 4 module. These are partially backed up by visual additions to contextualise the learning and environment.

The reason I changed my delivery was partly instigated by the students; they had complained about a different lesson, where they had been simply copying code from a worksheet, which made them feel demotivated.

I had a conversation with the group and negotiated a plan that I would adapt to meet their needs. Using the environment, I decided to get the students thinking, therefore I used the glass boards to create word clouds and asked the students to share what they had learnt so far. I felt anxious that this would be a barrier and the students may not participate, yet the students took ownership and participated.

“They all participated, and it worked very well the students were chatting and adding to the word clouds. We discussed the reflections and explored previous learning and links to industry “.

![Figure 1 - Images of word cloud task.](image1.jpg)

I thought “if this works, maybe I can go one step further”, whilst the students were adding their points to the word clouds, I quickly gathered a few ideas in anticipation for the class. I decided to create a project in an attempt to simulate an industrial environment. To build upon the challenge, the students could only communicate with me via email in the class, as this is typical in industry.

The layout of the classroom was a particular strength, as the students began to collaborate and were completely immersed in the tasks (as illustrated in the images below). The atmosphere was relaxed and positive.

![Figure 2 - Images of classroom session.](image2.jpg)

A week had gone by and after the success of the previous session, I wanted to challenge my teaching style further. The session started with the students adding to the word clouds, there was no hesitation and all students participated.
I introduced the students to a live project for a local company, the objective was to re-design and build a new website. I nominated a team leader and noted that all the students must participate. I was surprised at how the students managed this independent project.

“Surprisingly the team leader stood up and began to allocate roles based on the student’s strengths, he split them into smaller groups and negotiated jobs”

The students rarely asked me for help or advice, they worked as a team and communicated excellently, the student decided to use Microsoft Teams and Trello to collaborate on the project. I felt a great sense of pride and was enthusiastic by the student’s commitment to the project.

I prepared the word clouds on the board before the students entered the room and as the group entered the room, they greeted me and headed straight to the boards to add their additions. This seems to have become a routine and one that the students participated in with ease.

I simply handed over to the team leader and he was prepared to take control of the session.

“I noticed that he had stuck different elements of the website on the spare board – he used these to create a dynamic and elaborate discussion regarding the overall design of the website”

I observed the students collaborating and the activity which the students had created and delivered was a great success, the students were attentive and respectful. The atmosphere was relaxed and jovial, all the students participated, and the team leader split the group into smaller groups, and they all worked toward the end product.
5 DISCUSSION
This section discusses the findings which are supported by the literature. The questions attempting to be answered are: RQ1: How does my previous learning experiences affect my pedagogical practice? And RQ2: What factors motivate me to change my pedagogical practice and prepare students with ‘graduate’ skills for the workforce of the 21st Century?

During the thematic analysis of the findings, there were three distinct themes (1) Fit for Purpose, (2) Labour Intensive, (3) Learning Environments.

5.1 Fit for purpose
My past educational experience was not fit for purpose. Barrington [9] believes that a tradition didactic teaching style, does not encourage high-quality deep learning, instead a passive mode of learning. Therefore, it could be suggested that I wanted to create a fit for purpose environment to support my students.

I suggest that the situations that supported me to change my pedagogical practice are varied and dispersed across the reflections. In terms of the role of the teacher, it could be suggested that I became a facilitator to help students take ownership of their learning. Cotterall [16] indicates teachers should gradually withdraw support in order to build the students autonomy, additionally, Moguel (2004) expresses that teachers should be moving towards collaborative inquiry, instead of individualised instruction to prepare them for their future careers.

Whilst facilitating I used questions, encouragement and praise to motivate the students, this was noted as successful. Dankers [2] presents that to motivate and encourage students they must be given the ability to explore the learning. It could be suggested that this communicative facilitation prompted me to change my practice in the moment, providing individualised feedback to the students.

A key abstraction from the findings is where I shared my own personal struggles and experiences, this empathic approach built rapport with the students and supported them in their learning. Watanabe-Crockett [13] suggests that empathy is important as a teacher as it could encourage the students to grow ‘socially, intellectually, and emotionally’. Therefore, it could be assumed that I respond to situation based on my empathic communication with my students.

The students expressed dissatisfaction within another session, where they were simply copying code and felt demotivated. In response to this feedback, I decided to change my pedagogical practice, creating a real-world scenario, allowing the students to take over and create an engaging environment. In addition, I ensured that the students had clear objectives to meet by the end of each session. Ryan and Tilbury [27] express the importance of crossing the boundaries between real-world scenarios and educational experiences. It could be assumed that I was attempting to cross boundaries with the use of a real-life scenario.

5.2 Labour/Hard Work / Monotony
After several years of the same mundane note taking exercises, I became unconfident in my abilities. “A person who is academically unconfident is unlikely to easily become an autonomous learner, and learner confidence correlates well with academic success” Cotterall [16], thus, it could be assumed that since I did not learn in a traditional style, I could be empathetic to the student’s needs.
There are various accounts in the reflection that document how I adapted my practice in the moment, based on student feedback. One change that I made was the use of word clouds on the glass boards, this was used in order to encourage the students to build social interaction and share their knowledge. Ryan and Tilbury [27] indicate that promoting social interaction could help develop the student’s confidence. Therefore, it could be suggested that I was attempting to build a social and an inclusive environment.

I created a live project for a local company to design and develop a new website for the business, this project was completely student-led. Coterall’s [16], data deduces that allowing students to explore a nature of enquiry and think creatively to solve a problem, provides them with complex critical thinking opportunities and a powerful environment that fosters enhanced communication.

This was a change from my typical pedagogical approach and a risk, it could be assumed that I attempted to create activities where students took ownership of their learning and provide space for class discussions, debates, problem-solving tasks and collaboration with peers, therefore transforming the classroom.

5.3 Poor learning environment

During my high school education, the learning environment was uninspiring and typical of an 18th-century classroom, where students sat in rows and listened to the teacher dictate the curriculum. Gravoso & Pasa [31] expresses that this passive mode of learning is ineffective and does not encourage the student to become autonomous. I wanted to create a dynamic, inclusive, and flexible environment, where the students could take ownership and become autonomous.

I adapted my pedagogy to fit the logistics of the environment and the student’s needs. Each reflective account details a different styled classroom; however, I asked the students to step out of their comfort zones. Ryan & Tilbury [27] theories that teachers should be able to embrace change in their methodologies to create effective learning.

We used a development studio to develop the web site for the company and this room was excellent for collaboration. By giving the students complete autonomy in the classroom, the students took ownership of the room. They wrote tasks on the glass boards, split into smaller teams, and collaborated effectively. This activity enabled the students to become immersed and engaged in learning. Cohen et al [19] suggests that a café style pedagogy encourages social interaction, which is evident in the development studio.

6 CONCLUSION

Throughout this paper I have attempted to uncover what affects my pedagogical practice and discover what motivates me to change my practice and prepare students for a lifetime of work. I conclude that “the secret of change is to focus all your energy not on fighting the old, but on building the new” as quoted by Socrates, this is a key point to this paper.

We are aware that teaching with a traditional approach does not always support learning, there is evidence that teachers need to embed more inclusive, flexible approaches to teaching and learning. Furthermore, there is additional evidence that the workforce of the future must be highly skilled in their specialty along with a development of graduate ‘human’ skills.

This paper identifies that although my previous learning experiences were negative and impacted my confidence, it also indicates that it made me an empathetic and approachable teacher. I shared my personal struggles, continually challenged myself, took risks and reflected with students, which enabled a co-collaborative, inclusive classroom, where the students become curious explorers of knowledge.

Let us be open, communicative and involve the students in all aspects of the learning, teaching, and assessment, it is their learning journey after all.

REFERENCES


