Welcome to the University of life, can I take your order? Investigating Life Experience Degree Offerings in Diploma mills

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Abstract

In this study, we posit a new category of products provided by diploma mills, which we term Life Experience Degree Offerings (LEDOs). LEDOs uniquely capitalise on the misuse of the principle of Accreditation of Prior Learning (APL) by granting higher education qualifications based on a resume or CV alone. Through a comparative analysis with contract cheating websites, we highlight the key features and persuasive strategies employed by 10 diploma mill websites which provide LEDOs to attract and convince potential clients. We then use corpus linguistics methods by analysing a large corpus of text quantitatively to explore the keywords these websites use to describe their products using a pre-packaged corpus analysis tool (Sketch Engine). Our findings indicate that on providers' websites, the LEDOs are framed as a tool to achieve greater socioeconomic opportunities, and the quality and appearance of the physical diploma and accompanying documents play a key role in the LEDOs' value proposition, while references to the acquisition of knowledge and process of learning are absent. Furthermore, LEDOs are typified by the promise of accreditation and verification services, which are the two most common keywords used in the description of LEDOs on diploma mills' websites. Future research directions are suggested, including examining this phenomenon in non-Western cultural contexts, understanding the users and operators of LEDO websites, and assessing the prevalence of fraudulent credentials obtained from these sites.

Keywords: Life Experience Degree Offerings (LEDOs), Illegitimate credentials, Diploma mills, Higher education fraud, Accreditation of prior learning, Contract cheating, Value proposition

Introduction

In this article we undertake an exploratory analysis focusing on diploma mill websites which provide 'Life Experience Degree Offerings' (LEDOs). LEDOs are a specific type of product and service available from questionable Higher Education Institutions (HEIs) or diploma mills which offer higher education qualifications and credentials based on the submission of a resume or CV alone, rather than genuine professional experience. Uniquely, LEDOs take an accepted and integrity-driven academic practice of granting

credit for professional and personal experience, competencies, and expertise, and extend it to the point of illegitimacy, in doing so allowing consumers to potentially benefit from an illegitimate degree, while deceiving unknowing consumers into purchasing a qualification of little to no value. We choose the nomenclature LEDO to define these products based on the premise of an 'offer' from the provider to give the user a degree, in exchange for 'Life Experience' recognition.

The researchers were first alerted to LEDOs during their research on fraudulent qualification websites. Following further investigation, it was clear that LEDOs presented a topic of enquiry as a specific category of fraudulent credentials. In this study, we first undertake familiarisation with an example website and describe its appearance, features, and processes. Second, we analysed a collection of 10 LEDO-providing websites in relation to their persuasive features based on the framework provided by Rowland et al. (2018) for use in the analysis of contract cheating websites. Third, we used techniques from corpus linguistics to understand common themes and topicalisations of the language of these websites. This begins with an analysis of the keywords which describe the main foci of the websites' content, followed by an in-depth interpretation of random samples of these keywords in their surrounding contexts through concordance analysis.

Academic credentials maintain an important position in society and provide significant cultural capital. This has been described as akin to property rights, with degree-holders gaining benefits from increased opportunities in life (Grolleau et al. 2008). In the labour market, employers may request academic credentials from prospective employees or existing employees to progress up the career ladder (Eaton & Carmichael 2023b). Academic credentials also translate into economic gains, as in the United States, holders of a bachelor's degree may earn up to 75% more over their lifetime compared to high school graduates (CEW 2021). In the UK, the median salary is GBP 10,000 less per annum for non-graduates compared to graduates, while postgraduates command an average GBP 16,000 higher than non-graduates (GOV.uk 2021). These increased social and economic opportunities are a potential cause of credentialism, which is best described by the example of an employer expecting or preferring a candidate with an academic qualification, even if irrelevant to the job scope (Eaton & Carmichael 2023b). It has been argued that credentialism is the main explanation for the existence of diploma mills (Arnstein 1982), which confers illegitimate or unearned academic credentials to users in return for fees. From the sociology of education perspective, it has been argued that Western society's instrumental approach to higher education, under which credentials are required in as short a time as possible with as little effort as possible to gain recognition in the labour market, may be an explanation for violations of academic integrity norms, of which illegitimate or fraudulent credentials can be a part (Roe, 2022).

In the following sections, we detail how these websites operate, the strategies they use to appear legitimate, and how the language used on these websites differs from that on contract cheating websites. We do this by employing an analysis of persuasive features and using a simple-to-use, easily interpretable corpus linguistics package available online to highlight key words the websites rely on to sell their products. By exploring LEDOs, we aim to understand their unique position in the broader landscape of diploma mills and online services for committing breaches of academic integrity and provide insight into the structure and character of this specific type of fraudulent credential.

Understanding LEDO in the context of degree, diploma, and accreditation mills

Before exploring LEDOs, we first need to outline what we deem legitimate or illegitimate credentials and qualifications. We define 'legitimate' as qualifications which are earned through sufficient work from an institution which operates with academic rigour, and has a minimum of quality control assurance policies and practices in place to ensure integrity of the education process. Illegitimate qualifications are awarded from institutions that do not have such processes in place and are often provided by 'mills'. The term 'mill' can encompass diploma mills, degree mills, and accreditation mills, but their definitions are not widely agreed upon. Contreras and Gollin (2009) , for example, defined a degree mill as a real degree from a fake college, with a diploma mill providing a fake degree from a real college. Grolleau et al. (2008) provide a broader definition which describes a diploma mill as universities or schools which sell or award qualifications requiring less than a 'minimum standard' of academic work, which are often unaccredited or accredited only by accreditation mills which provide false assurance of quality. In this study, we use the definition of diploma mills offered by Grolleau et al. (2008), as it is most relevant to the subject of LEDOs and widely defines the problem that is being faced, namely the awarding of qualifications without sufficient academic merit.

We define LEDOs as a specific product offered by diploma mills that uses the illegitimate application of Accreditation of Prior Learning (APL) to justify their awarding of higher education qualifications and credentials based solely on a resume or CV, rather than genuine professional experience. LEDOs consist not only of a physical diploma but also offer value-added services such as additional documentation and verification processes. This includes reference letters, award certificates for high marks, endorsement letters from faculty, and certificates of membership to alumni organisations. The method by which users may be unknowingly deceived regarding the legitimacy of the product distinguishes them from offerings such as fake diplomas which may also be provided by diploma mills.

Diploma mills are an issue for society, as they award academically meritless qualifications, which may create doubt in the value of the education system itself and contribute to an unfair situation for those who have earned legitimate degrees (Contreras & Gollin 2009). Those who obtain such fraudulent qualifications have been described as 'free riders' on the earned property rights of others (Grolleau et al. 2008). In order to convince consumers and other stakeholders, diploma mills often adopt tactics to deliberately create confusion as to whether they are 'real' or 'fake', for example by adopting names that are strikingly similar to the names of reputable and established HEIs (Duklas 2023). The use of diploma mills also presents other specific risks, including poor return on their own financial investment for the user, future damage to a user's career or reputation if the use of these services is discovered, and damage to the reputation of HEIs if their name is misappropriated (Grolleau et al. 2008). The risks of staff in the academy using fraudulent credentials also have a negative impact on students (Eaton and Carmichael 2023a), so stakeholders in legitimate educational contexts may also suffer negative effects from these organisations. Consequently, the only real beneficiaries of these services are the operators of diploma mills, who can generate large profits as a result of the low cost of goods sold (Ezell 2023). In contrast to the infrastructure of a legitimate HEI, a diploma mill operator may require nothing more than printing equipment and costs

of website development and maintenance. However, it should also be noted that users of such services may not know what they are getting into and become unwitting victims of fraud. Many individuals with good intentions to gain honest education and improve their socioeconomic opportunities have been deceived and swindled by pseudo-schools and fake credential business operators (Eaton & Carmichael 2023b).

Despite cases of businesses supplying fraudulent credentials being traced back to the 17th Century (Eaton & Carmichael 2023b), such organisations are not tolerated as a perennial and immutable part of the higher education landscape. Eaton and Uvalic-Trumbic (2008) identify significant global actions that have been taken against degree mills since the 1990s. These include official bodies such as governments taking actions by publishing lists of names of institutions that are deemed legitimate or illegitimate, closing existing organisations, and driving public information campaigns (Vinten 2008). In the United Kingdom, the British Accreditation Council (BAC) works with the UK government, and only accredited institutions on this list are acceptable for students applying for visas to study there (Vinten 2008). The growth of the internet has also contributed to the publishing of lists on public websites to act as a record of illegitimate institutions. Wikipedia, for example, contains pages including a 'list of unaccredited institutions', a 'list of unrecognised institutions of higher learning', and a 'list of unrecognised higher education accreditation organisations".

However, while actions against diploma and degree mills have increased over the past few decades, the onset of the COVID-19 pandemic has equally been implicated in increasing cases of educational fraud because of the complex pressures of the external economic environment and increased feelings of personal insecurity, and from 2018 to 2021 at least 85 'fake' UK university websites were shut down by the authorities (Hall 2021). Furthermore, continued automation of academia (Noble 1998) may play a role in the increased commodification of academic degrees. In the context of the internationalisation of higher education, there are further concerns about the spread of fraudulent or illegitimate qualifications, as education is increasingly exported around the world. There have been reports of legitimate U.S. HEIs partnering with dubious or poorly regulated partner institutions in other countries may lead to 'degree-laundering' systems (Knight 2008). To curb such issues, in China, there is a list of recognised foreign institutions, with any HEIs wishing to operate there being required to work with a Chinese partner institution (Eaton & Uvalic-Trumbic 2008).

In the struggle for diploma mill operators to be perceived as legitimate, another variety of mills provide support: the accreditation mill. The accreditation mill can be considered an offshoot that provides a symbiotic relationship with diploma mills. Diploma mills require accreditation, yet they are unable to obtain legitimate accreditation due to the absence of robust policies and procedures in place to assure legitimate accreditation bodies of the quality of their offerings. Consequently, accreditation mills have been created to provide this stamp of assurance to prospective consumers. It is possible that there are deeper affiliations between diploma and accreditation mills and their operators, but this is an unexplored topic in the literature. Piña (2010) explains that accreditation mills often adopt a strategy of selecting a name very similar to a legitimate accreditation agency in the same manner as degree mills adopting a name similar to legitimate HEIs. To further bolster their perceived credibility, diploma mills use a number of other

tactics, including referencing non-government agencies that are largely irrelevant to educational assurance such as the United Nations, referring to private organisations that 'recognise' or 'accept' their degrees, cautioning against other 'unaccredited' institutions, and creating doubt in the system of accreditation itself (Vinten 2008). Creating doubt in the accreditation system is especially pernicious, as this tactic preys on the grey areas between the multiple standards and types of educational accreditation. For example, in the U.S., there are exemptions from accreditation for religious degrees, and some states, such as California, do not require accreditation to issue a degree (Contreras & Gollin 2009). Diploma mills can exploit these differences to justify their lack of accreditation or the type of accreditation they hold. This leads to deception either for the user when they choose to obtain such a qualification or further down the value chain for a prospective employer when they assess a candidate's credentials.

Examining the characteristics of the 'Life Experience Degree Offering' (LEDO)

A 'degree' is defined for our purposes as a public, academic, higher education credential which has been assessed by a qualified instructor in a structured, systematic way (Contreras & Gollin 2009). LEDOs are not considered legitimate degrees because they do not meet this definition. Instead, we characterise LEDOs as fake academic credential products which are offered by diploma mills. While little is mentioned in the literature on these products, Brown (2006) identified the category of obtaining a degree by purchasing a testamur based on life experience, and Piña (2010) outlined the way in which unearned diplomas were offered in exchange for lived experience. Because of the unique dimension of offering credit for this life experience, LEDOs are not the same as other fake degrees that are unmistakably forged or illegitimate and are offered by diploma mills. LEDOs leverage the established academic principle of Accreditation of Prior Learning (APL), also known as Recognition of Prior Learning (RPL), to justify their claims and mislead consumers.

APL refers to the process by which learning taken previously (and often informally) outside an educational institution is quantified and granted recognition as part of an educational program. This is a growing practice in higher education worldwide (Stenlund 2010) which has been claimed to help widen participation and increase inclusion (Andersson, 2006). APL is conducted when an assessor judges or benchmarks the value of the verifiable, professional, or personal experience of a candidate against an academic programme or course. Although there are concerns over the application of quality criteria during the APL process (Stenlund 2010), exemptions for relevant modules, subjects, or coursework are offered by many legitimate and reputable HEIs, especially in the case of student mobility between HEIs or for professionals carrying out degree programmes after significant prior experience. For example, a licenced, professional pilot undertaking a PhD in aeronautical engineering is likely to gain an exemption from entry-level courses in aircraft operations that would be required for someone with no background in aviation at a legitimate institution. A legitimate institution provides APL in cases where it is applicable and demonstrable, while an illegitimate institution grants APL without due diligence and indiscriminately, even in unrelated subjects and on the basis of invented or unsubstantiated experience.

LEDOs leverage this principle by applying APL to unspecified 'life experience' without a transparent process, in ways that are often 'guaranteed' to those who apply, and in almost immediate timeframes once payment is made. For a LEDO provider, the institution may accept personal or professional 'life experience' for a degree in aeronautical engineering by virtue of having been on an aeroplane several times. This example demonstrates the contrast with the process by which legitimate universities award advanced standing or credit for relevant professional or personal experience if it is transparent, verified, and assessed (Piña, 2010).

Methodology

Familiarisation with the LEDO experience

The inspiration for this research came from an online advert directed towards one of the researchers during the investigation of fraudulent qualifications. The advert in question offered a PhD to be attained 'instantly, based on prior experience'. As previous studies have indicated that an estimated 70% of such experience-based qualifications are at the doctoral level (Contreras & Gollin 2009), we began by undertaking an online search for the term 'Life Experience PhD'. The first result offered us an 'accredited life experience degree program' from Charleston State University, and we used this result as the basis for our initial familiarisation with the topic. To determine whether the websites we located were genuine, we referred to Ezell and Bear's (n.d.) list of '92 red flags' that indicate a bad or fake school.

After accessing the website, the user is guided through several steps. This begins with an introductory page complete with highly positive testimonials and 'success stories' from 'alumni'. The university claims to have over 6,000 students in its community, unspecified as current or alumni, and over 300 different majors. Multiple references are given to the perceived economic and social benefits of obtaining a degree of any description, and on scrolling down further the user arrives at an 'apply now' page which gives details of the product that is provided on 'graduation'. For this example website, the LEDO comprises an 'original accredited degree', two sets of transcripts, a certificate of membership, an award of excellence, a certificate of distinction, and four education verification letters. At each step, there is a prominent membership logo for the Accrediting Commission of International Colleges and Universities (ACICU). The ACICU is an unrecognised accreditation agency (CHEA 2006) and appears on the list of unrecognised accreditation agencies on Wikipedia. Having continued to the application page, the user is advised to select their programme from a list of multiple degree options, including Associate, Bachelor, Master, or Doctorate. The fees ranged from USD $299 for an Associate's degree to USD $449 for a Doctoral degree. It is equally possible to obtain further discounts by purchasing combined products (e.g. both a master's and doctoral degree). The most comprehensive package includes an Associate's, Bachelor's, Master's, and Doctorate degree for close to USD $1,300. This contrasts with the average annual tuition figure in the United States of $3,660 for a two-year college to $35,830 for a private four-year college (Top Universities, 2023).

The user is given flexibility in choosing the date of graduation, title of degree, major, and grade. If a major is unavailable in the comprehensive list provided, the user can choose to enter it. However, an advisory paragraph explained that it is recommended to

have four years of experience in the chosen field and to have finished secondary school. Provided this information is supplied, the relevant life experience is guaranteed to be assessed by a panel of ten members (although further information is not provided on this panel), and turnaround on the qualification will be provided within 24 h. The website and sales process is sophisticated, interactive, and highly polished, and there are significant opportunities to contact the website operator to confirm details or ask questions. A blog page provides search-engine-friendly general content regarding the statistics of higher education qualifications and their value in achieving a higher salary, new career, and greater social status, while there is no mention of the value of education or the focus for the subjects to be studied or exempted from. In other words, the focus here is on the physical artefacts of education and cultural capital in pursuing greater employment opportunities. The value proposition is most clearly related to a high return on investment and a physical representation of a credential rather than the knowledge and experience that underpins it.

Comparison of LEDO and contract cheating websites' persuasiveness

Following the initial familiarisation with an exemplar, we aimed to identify the specific techniques used to persuade potential users to purchase a life experience degree. As we are not aware of any specific studies that examine the persuasive features of diploma mill websites, we selected the framework for analysing the contract cheating websites used by Rowland et al. (2018).

Despite some differences, both services are illicit, violate the principles of academic integrity, and often (though not always) rely on a web-based interface to recruit customers. Rowland et al. (2018) analysed the persuasive features of contract cheating websites using a framework comprising informativeness, credibility, involvement, and reciprocity, as used by Díaz and Koutra (2013). A summarised reproduction of the table containing these dimensions and their definitions, compiled from Rowland et al. (2018), is presented in Table 1. Table 2 presents the methodology used in this study.

Following the selection of this framework, we conducted a second online search using the terms 'Life Experience Degree', 'Life Experience PhD', 'Doctorate from Life Experience', 'Life Experience Master's Degree' and 'Life Experience Bachelor's Degree'. To select websites, our criteria included, first, websites offering a process of obtaining a PhD or other academic degree on the basis of APL without additional requirements other than payment and submission of a self-authored CV or resume. Second, websites had to clearly refer to 'life experience' as forming the basis for APL to obtain the

Table 1 Dimensional features of website persuasiveness related to contract-cheating websites

Dimensional features	Characteristics of the features
Informativeness	Offers specific and relevant information to the user, including prices and product details
Credibility	Enables trust of the vendor on behalf of the user. Focuses on how 'surface credibility' (Rowland et al 2018) features gain the trust of a user
Involvement	Enables the user to interact and engage in communication with the website, provide feedback, or share it to social media
Reciprocity	Offers users features including 'rewards' such as discounts, newsletters, or additional reciprocal information exchange

Table 2 Methodological Process

Step	Method
1	Initial internet search using key term 'Life Experience Degree'
2	Familiarisation with websites through close reading
3	Additional search and collection of 10 websites
4	Analysis of persuasive features of 10 websites using Rowland et al.'s (2018) framework
5	Compilation of 10 websites into a web corpus using Sketch Engine
6	Keyword analysis of web corpus to indicate major topics and themes
7	Qualitative-interpretive analysis of randomly selected concordances related to identified keywords

Table 3 LEDO Website Collection

Website Name	Date of Access	Website URLs
Charleston State University	23rd February 2023	https://www.charlestonstateuniversity.com
Ashwood University	25th February 2023	https://www.ashwooduniversity.net/ashwood/life_experience_degrees_programs.asp
Sheffield State University	25th February 2023	https://www.sheffieldstateuniversity.com/
Los Angeles University	25th February 2023	https://www.los-angeles-university.education
Degree Pros	26th February 2023	https://degreepros.com/
Hampden State University	1st March 2023	https://www.hampdenstateuniversity.com/
Oneida University	20th February 2023	https://www.oneidauniversity.com/
Concordia College & University of Delaware	21st February 2023	http://concordia-college.net/
Instant Degrees	21st February 2023	https://instantdegrees.org/
College Degree Fast	24th February 2023	https://college-degree-fast.com/

degree, meeting our definition of a LEDO. We did not include websites that offered seemingly generous accreditation of APL, but still required formal learning and no 'guaranteed' outcome of APL being recognised without assessment. While Rowland et al. (2018) obtained 47 contract-cheating websites and narrowed down those for analysis to 10, we were only able to find 10 websites with LEDOs, so all were included. The URLs of these sites are listed in Table 3.

We then analysed each website using the dimensional framework of informativeness, credibility, involvement, and reciprocity, and compared these results with those of Rowland et al. (2018), as shown below.

To explore our research question of understanding not only the persuasive features of LEDO websites but also how they communicate linguistically with their audience and the key terms that they use to define their product, we extended our analysis using corpus linguistics techniques. To do so, the texts available on each website were compiled into a corpus using Sketch Engine's automatic corpus compilation feature. Sketch Engine is a fourth-generation web-based concordancing program which automatically compiles, tags, and marks-up text for use in a corpus. As a result, we were not required to manually download website text for storage or data cleaning. As texts were freely available on the Internet and using a web-concordancer effectively dealt with potential infringement on copyrighted material (Hardie & McEnery,

2011), we fulfilled all ethical requirements for this research. The total size of the corpus obtained was 20,586 words.

Two techniques were used to analyse the corpus. The first is the keyword analysis. Keyword analysis is a test of significance (Hardie & McEnery, 2011) which identifies terms that appear in the focus corpus more frequently than in a reference corpus through statistical and quantitative analysis. We chose to compare our corpus with the EnTenTen corpus, which contains 36 billion words of English collected between 2019 and 2021 from the Internet (Sketch Engine, 2015a).

We ran keyword analysis five times to ensure consistency in the results. Following the extraction of the five most common keywords, we conducted concordance analysis. Concordances are lists of terms searched for in the context in which they appear (Baker 2006). Although the language is decontextualised to some extent, it is possible to gain a macro view of what is happening within the corpus data by combining quantitative methods (such as keyword analysis) with interpretive and qualitative methods such as concordance analysis (Baker 2006). We use this approach to conduct 'in-depth scrutiny' and inductive analysis of the concordances to understand patterns of meaning that are less likely to emerge from quantitative measures, such as word lists (Wulff & Baker 2020).

Results and discussion

Feature comparison

Our first set of results, shown in Table 4, found significant similarities in the use of persuasive features on LEDO websites when compared to the features used in contract cheating websites, as identified by Rowland et al. (2018).

From the analysis and comparison of features appearing on contract cheating websites, several differences were revealed. First, some categories identified in the work of Rowland et al. (2018) appear irrelevant. 'Quality writing' is an example of these, given that there is little writing obtained in a LEDO purchase compared to a purchase of a written assignment.

Furthermore, three new categories specific to the LEDO websites were identified. The first of these is 'Accreditation'. More than 80% of the websites surveyed contained references to at least one accreditation body. The most common of these was ACICU. Little information is available on ACICU, but it is listed as an unrecognised higher accreditation organisation on a comprehensive list of accreditation mills on Wikipedia (2023). which may serve as a valuable resource for consumers undertaking due diligence. One website in the sample contained references to five accreditation bodies, including the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), which does not accredit educational institutions. This tactic mirrors the findings of Vinten (2008), who stated that references to the United Nations are often used to imply legitimacy for accreditation.

The second category found through this analysis is the 'Verification Service'. The premise of the verification service is for prospective employers or agencies to verify the issuance of the degree. In practice, this seems to be provided through email addresses for professional reference. 70% of the websites surveyed offered this service, suggesting that this is a key feature required for prospective purchasers with a life experience degree.

Table 4 Comparison of persuasive website features between Contract Cheating and LEDO sites

Framework dimensions	Persuasive feature	% of websites with feature in contract cheating websites (Rowland et al. 2018)	% of websites with feature in LEDO websites
Informativeness	Services described	100	90
	Services available	100	100
	Online ordering	100	100
	>1 ordering button on home page	82	80
	Price	73	80
	'Prices start from' statement	45	30
	Obtain a refund/revision	64	20
	Instructional flowchart	64	80
	Contact us	91	50
	Terms of use	91	40
	Career	18	20
	Head office location	18	20
Credibility	About us	73	90
	Company history detailed	18	50
	Privacy policy	82	80
	Quality work	91	60
	Quality writers	100	0
	Delivery details	73	60
	Price assurance	91	90
	Payment security	91	60
	Satisfaction guarantee	64	10
	Privacy/confidentiality guarantee	73	70
	Testimonial statements	¢	¢
	Testimonial: Any type	82	70
	Testimonial: Testifier names	64	40
	Testimonial: Geography location	55	60
	Testimonial: Testifiers pictures	18	50
	[a]Accreditation	N/A	80
	[a]Verification service	N/A	70
	[a]Experience requirements	N/A	40
	Feedback	91	30
Involvement	Blog	64	30
	Social network	82	20
	Share the page	10	10
	Live chat	91	0
	Personal account login	100	30
Reciprocity	Discount free items	64	20
	Newsletter	10	0

[a] These represent new categories specific to credibility found in websites selling LEDOs

The third unique category was 'Experience Requirements'. Varying requirements of personal and professional experience were found, primarily to distinguish between the different levels of degrees being awarded. One website expressly required eight years of 'life experience' to grant a PhD, while others asked for two to four years of professional

experience. All websites surveyed, however, required a curriculum vitae or resume to be submitted for 'assessment', often guaranteeing a successful outcome within a 24-h window.

Regarding the other categories, satisfaction guarantees, refund policies, terms of use, and live chats were much less common compared to contract cheating websites. From this, it seems that these business models are less sophisticated and require lower investment in persuasive resources compared to contract cheating websites, which may reflect the smaller market for those seeking such a product. With the exception of Charleston State and Concordia College & University of Delaware, many seemed to be outdated, with broken links, unintuitive site maps, and missing crucial information required to make informed purchases. Several sites required the user to make contact through a web form for 'consultation', rather than supplying a log-in, personal account, or live chat. Several websites had a 'leave a message' feature, but no synchronous, real-time consultation.

Assurance of quality work was featured in six out of ten websites surveyed, but this tended to be focused on the artefact of the degree. Most websites referenced their printing process, the quality of lettering, embossing of degree seals, and the types of paper used. One website even supplied university regalia and graduation robes in the institution's colours for an additional fee. Testimonials were equally common, although with LEDOs they were more frequently phrased as extracts from an 'alumni network'.

In all cases, the LEDO website experience is far more mysterious and opaque than those for contract cheating, as identified by Rowland et al. (2018). It seems that it is often necessary to make initial contact with the 'institution' through a web form to discuss the details of the desired product before the documents are shipped to the user after their 'assessment' process. However, we did note varying appearances of legitimacy. A small minority of websites appear to have a clearly developed structure, similar to that of a legitimate institution. In these cases, prices are not advertised, learning materials are available for download, and an online LMS platform is offered. There are alumni testimonials with significant details and convincing descriptions of the programmes on offer. This suggests that there is a significant stratification in these website offerings in their attempts to appear legitimate. Some seem to be outdated and in a state of disrepair or lapsed operation, while others appear to be making efforts to invest heavily in developing a user experience similar to that of a user applying for a legitimate institution. One website offered an alumni support forum for social networking, although it was inaccessible without login details.

In sum, there seems to be great variation between the quality and approach of LEDO websites. Some seem to offer purely transactional, quick, and highly price-based services. On the other hand, others take an approach more closely mimicking the operations of a legitimate HEI. To this end, features such as career counselling and alumni networking were offered. One of the websites surveyed claimed to be celebrating their 24th anniversary, while several others indicated that they had been in operation for periods ranging from eight to ten years. Some advertised advanced features, including QR codes for checking the 'legitimacy' of the degree, sealed transcript files, and raised-ink embossed diplomas. It seems that for sites which are more complex and operate a more sophisticated service with a structure and image that closely mimics legitimate HEIs, there is a greater risk that naive consumers could reasonably believe that they are

purchasing a legitimate academic credential and having their prior life experience form a robust APL assessment.

Keyword analysis

Having identified some of the unique features that typify the user experience and persuasive features of these websites in comparison to contract cheating websites, we utilised keyword analysis to explore the key elements appearing in the corpus of LEDO websites. Our results for the initial keyword analysis created through Sketch Engine are shown in Tables 5, 6, 7, 8, 9 and 10. Proper nouns such as 'ACICU' or 'Charleston' were excluded from the results because they occur at a predictably high rate in the focus corpus in comparison to the reference corpus, which totalled seven words, while prepositions and determiners ('a', 'the') were also excluded. We selected the top five keywords, after which there was a sharp drop in the keyness and frequency. By raw frequency, we

Table 5 Five most frequently occurring keywords in the LEDO corpus

Number	Keywords in ranked order	Keyness score	Raw frequency of keywords
1.	Accredit	501.3	148
2.	Doctorate	439.8	58
3.	Diploma	284.2	69
4.	Verifiable	266.5	14
5.	Degree	192.1	600

Table 6 Concordance Lines for Keyword: Accredited

Concordance Number	Concordance Lines for Keyword: Accredited
1	These Private Colleges and Universities are prepared to award YOU, a genuine, registered, verifiable and accredited degree in return for a small donation
2	As long as you have work experience, job training, or verifiable facts… we can help you get a DEGREE. Our service provides privately accredited college & university degrees
3	University degrees (online accredited degrees, online university degree, ph.d degree) that are 100% legal and 100% verifiable
4	Asia, Canda, UK or United States… or anywhere else in the world—our service turns your life experience into a legal, verifiable college degree
5	Think about it. Even if we charged you $300 for a degree, it would be worth it. You get it in a few days—and it's a real, verifiable degree that is recognized and respected by job employers all over the US and worldwide

Table 7 Concordance Lines for Keyword: Doctorate

Concordance Number	Concordance Lines for Keyword: Doctorate
6	In many fields, the highest degree you can have is a doctorate degree. Typically, it may take 4 years or more to earn a doctorate
7	This is the reason why a doctorate is being offered to maximize the potential of an individual
8	You can explore a lot of opportunities if you have credentials that indicate a doctorate degree
9	Kudos! My Doctorate degree arrived faster than I thought. The embossed diploma, and surreal transcripts are amazing
10	We are by-far the cheapest solution for those who want to buy a Doctorate from a real University

Table 8 Concordance Lines for Keyword: Diploma

Concordance Number	Concordance Lines for Keyword: Diploma
11	Before we go any further, we want you to know… Warning: Diploma mill and Fake Degrees are Illegal. Diploma mill often claim accreditation by a fake accrediting agency to attract more students to their degree programs
12	The diploma folder is made with luxurious leatherette, white silk moiré top panel, white cover ribboned bottom panel
13	GUARANTEED! USE THE EXPERTS FREE VERIFICATION of real legally issued college degrees for any employer to VERIFY your diploma and graduation details on the school's official website
14	Embossing passes all the way from the front of the diploma, to the reverse side. This website charges no fees!
15	Basically, we promise a LEGAL and lower cost alternative to using fake, counterfeit or phony degrees diplomas and certificates

Table 9 Concordance Lines for Keyword: Verifiable

Concordance Number	Concordance Lines for Keyword: Verifiable
16	16. After getting an online college degree program in computer science Verifiable Degree I was able to enter the job market and my boss is extremely happy about that
17	17. These Private Colleges and Universities are prepared to award YOU, a genuine, registered, verifiable and accredited degree in return for a small donation
18	18. Our service is 100% legal, 100% verifiable, 100% legitimate and proven to increase your chances of getting a better job that pays you what you truly deserve!
19	19. We do however request you to send us a copy of your verifiable resume in order to properly determine whether you should be admitted
20	20. ID card is registered by Academic Registrar of your chosen university, therefore, it is recognizable, certifiable, verifiable and serves as official picture ID

Table 10 Concordance Lines for Keyword: Degree

Concordance Number	Concordance Lines for Keyword: Degree
21	21. Is there really a way to get a "same day Doctorate degree," with transcripts? Yes, there is. Our Fast Online Doctorate degree programs, allow professional individuals, and working adults, like you—to get their post graduate Doctoral degree
22	22. Income for recent graduates reaches $52,000 a year for bachelor's degree holders
23	23. Do you feel isolated, stuck, inadequate with your life's progress… because people your friends and family have degrees … but you don't… and there's nothing you can do about it—because you're too old to learn all the "new stuff"?
24	24. LAU is an accredited online university dedicated to enhancing access to degrees of higher education for qualified students
25	25. Most of you don't know that your own life experience have given you a good chance to earn credits for your college degree

refer to how often the term appears in the corpus, and by relative frequency, we refer to it in comparison to other terms. The 'keyness' of a term refers to how often the term appeared in our corpus in comparison to the reference corpus. The keywords selected are listed in order of keyness score using a determining formula known as the 'simple maths' method, which is automatically processed on Sketch Engine (Sketch Engine, 2015b).

The top five keywords extracted from the LEDO corpus are listed above. Keyword analysis has been described as a helpful point for beginning the analysis of language, as it can identify patterns that represent unique communication styles in different contexts (Adolphs et al. 2004). We then followed the recommendations of Adolphs et al. (2004) to find concrete examples of keywords in the context using concordance samples. These five keywords can be categorised into two themes which are telling about the nature of the LEDO website and the way in which the products are communicated. First, the keywords 'doctorate', 'degree', and 'diploma' signify the core product on offer. The fact that 'doctorate' holds the highest keyness score seems to corroborate the view that such degrees are the most sought after in the context of LEDOs. Second, the keywords 'accreditation' and 'verifiable' correspond to the themes of legitimacy and reliability or quality assurance of the product.

Based on the principles of Search Engine Optimisation (SEO), it is likely that these websites build their strategy of communication to appear in a high position on a search engine's homepage when such terms are searched. From this, it can be posited that users who wish to obtain a degree based on life experience want one that is 'real', that is valid, and can be externally verified. Consequently, LEDOs play to this market need by creating a facade of accreditation and verification through two primary methods: the accreditation mill and the 'external verification service', which through our research is based on correspondence with a 'third-party' email address, although one website, College Degree Fast, appears to use a QR Code system for 'verifying' through scanning using a smartphone or QR scanning device.

Concordance analysis

To explore the use of these terms in context, we performed a concordance search. Concordances are lines of text which centre around the term chosen and provide context of the few words either side of the term, known as the 'node'. Analysing concordances enables the researcher to identify patterns of language use through the identification of features, such as repetition, shared themes, or discourses (Baker 2006). To perform this analysis, we generated random samples of five concordances using each keyword to provide a sufficient yet manageable amount of data.

In the above, 'accredited' occurs as an adjective to describe the value and legitimacy of the product on offer, commonly co-occurring with other near-synonyms, such as 'genuine'(1) and 'verifiable' (1, 2, 3, 4). This suggests that a key concern of the user is 1) that the product be seen as 'real' rather than 'fake' and can be ratified or verified as legitimate by a third party. However, a follow-up inspection of the website sample indicates that while 'legal' is often referred to, this is ill-defined. The use of 'verifiable' as an adjective rather than 'verified by' as the verb has the effect of hiding who, or what verifies the product. Likewise, accreditation occurs without attribution to an agent. In this case, accreditation and verification are honest propositions, while the hidden dimension of meaning is that accreditors and verifiers themselves are dubious.

From this set of samples and the high density of the keyword 'doctorate', the popularity of this terminal degree in diploma mills is further corroborated, as almost three-quarters of degree mill qualifications are thought to be doctoral (Contreras & Gollin 2009). A doctorate in these concordances is described in superlative terms as the 'highest' degree

which offers a chance to explore a greater range of opportunities in life. This is a key benefit on which the purchase of a qualification is presented, despite the likelihood of a net negative to the user rather than a benefit (Grolleau et al. 2008). In line (6), the average amount of time is presented (four years) which may serve as a contrast between the reality of a traditional route to a doctorate and the near-instantaneous services offered by life-experience degree mills. Speed recurs as a theme in (9), describing the physical delivery of a diploma. Drawing on these samples, it appears that users are often seeking to obtain their degree quickly, and both speed and cost-effectiveness are highly prioritised, a characteristic which LEDO websites seem to be exploiting.

In the set of concordance samples relating to 'diploma', the initial line (11) gives evidence for Vinten's (2008) assertion that such sites often caution against unaccredited institutions in an effort to differentiate themselves and identify themselves as legitimate, even describing accreditation obtained from accreditation mills. Similarly, (15) contrasts the physical product on offer as legal in relation to other 'fake' diplomas. The physical artefact of the qualification is highlighted again, as (12) describes the condition of the folder in which the diploma arrives, while (14) describes the quality of the embossment (presumably of the logo of the awarding institution).

'Accredited' and 'verifiable' occur together frequently, resulting in the same concordance occurring for a second time here. The process of verification is not only related to these concordances to the qualification of the university but also to the user. To engage in reciprocity, (19) indicates that a resume sent in must equally be verifiable, presumably by the website, while (20) describes a picture ID card which is supplied as part of the product to demonstrate evidence that the customer 'attended' the institution. The frequent concordance of 'accreditation' and 'verifiable' suggests that users of these services may have concerns about external perceptions of the purchased product and require frequent reassurance that there is demonstrable evidence which can be provided to third parties on request if questions are raised, therefore enhancing the perceived trust and confidence in the product.

'Degree' was one of the most frequent keywords in the corpus, appearing over 600 times. In this sample of concordances, (21) addresses the reader to identify that the audience is busy professionals who require a doctorate degree quickly, implying that they do not have the available time to study but would be otherwise capable of attaining the degree. This can be seen as a justifying or morally neutralising way of presenting such a credential, playing on the cultural motif of the busy working adult who requires a credential to progress but does not have the available time or financial resources to invest in them. Concordances (22) and (23) seemingly identify the same driving motivation for users, namely, to improve life prospects by demonstrating the average earnings of those with a degree in (22), and then in (23) appealing to the reader's emotion, assuming a feeling of stagnation in response to friends and family having a qualification that the reader does not.

Concordance (23) specifically focuses on age, suggesting that the targeted audience for such qualifications are older adults. By taking the views of (21) and (23) together, it can be posited that from this small sample, the target audience may consist mainly of mid-late stage, fully employed people who wish to achieve greater socioeconomic opportunities; thus, an option for 'same-day' improvement of such life circumstances

with comparatively little investment in time or money would be desirable, and further research on LEDO purchasers would be valuable in this regard. Concordance (24) identifies a specific institution and demonstrates the density and use of other keywords, such as 'accredited'. The language used relates to inclusivity and equity, suggesting that 'enhancing access' is part of the institution's mission, while (25) reiterates the principle of APL in the manner of revealing a secret to the reader, as in the phrase 'most of you don't know' to imply that APL is a secret or obscure, yet legitimate method of obtaining an academic degree. Again, this demonstrates the technique by which LEDO websites adopt valid academic principles, such as APL, and present them as justification for granting valueless degrees.

Discussion

By exploring the keywords and conducting a qualitative concordance analysis of samples of these keywords, several conclusions about how these sites operate can be drawn, which are best visualised in comparison to Rowland et al's (2018) analysis of contract cheating websites. Similar to contract cheating websites, there are a variety of persuasive strategies and features used to convince users of the value of their products, with many of these strategies seeking to capitalise on the desire of users of these services to advance their socioeconomic status. However, investment in a life-experience degree is higher than that of a single piece of work from a contract cheating website. A single-page essay may be as low as AUD $11.99, while the cheapest certificate (an Associate's Degree) in our analysis was at least USD $299.99. This pricing strategy may further legitimise the product in the eyes of a user with little experience in higher education, believing that this substantial, but potentially realistic sum would equate to a 'reasonable' fee to verify their life experience against the requirements of a degree.

Further, we argue that, whereas contract cheating sites persuade users through problem recognition (identifying that they are facing a challenging and urgent circumstance), life experience degree providers market their products based on opportunity recognition. Lines (6), (7), (8), and (18) highlight this feature, given that they discuss the ability of an investment in an LEDO to enhance users' employment opportunities, increase their salary, and gain further recognition in the labour market. Similar to contract-cheating websites, LEDO providing diploma mill websites offers unsubstantiated claims and promises regarding the value and veracity of their products. These often use terms such as 'verified', 'legal', and 'accredited', while hiding the key information that the agent supplying verification or accreditation is equally dubious or illegitimate. Given that evidence from Attewell and Domina (2011) identified that holders of fake degrees do not suffer a wage penalty compared to holders of legitimately earned degrees, the potential financial upside for holders of these 'Life Experience Degrees' is significant.

While LEDOs seem to be few in number, it is unknown how many of these fraudulent credentials are issued annually and how effective they are in practice. Although evidence from Attewell and Domina (2011) indicates that in the USA, up to 6% of claimed BA degrees are fake, there are no existing data exploring unearned higher degrees. Furthermore, the websites surveyed offer international shipping and, despite being mainly U.S.-based, clearly serve an international audience. It is possible that such degrees are being used more in countries with weaker infrastructure for verifying credentials or in

contexts where there is a reduced understanding of the different types of HEIs. Ezell's (2023) investigation into Axact, the 'world's largest diploma mill', based in Pakistan, estimates that this single organisation has sold over 9 million diplomas and transcripts internationally over a 24-year period, having equally set up accreditation mills purporting to be from the U.S. but originating in the Middle East, thus deceiving students and other stakeholders into believing they are obtaining a 'U.S. degree'. Although Ezell's (2023) work focuses on diploma mills, not LEDOs specifically, this is an indication of the potential scope of the problem.

The limitations of this research include the relatively small size of the corpus, which reflects the fact that LEDOs seem to be niche products compared to diploma mills in general. We recommend further research in this area to explore the LEDO phenomenon by focusing on a smaller subset of websites, developing a more fine-grained analysis, and exploring the phenomenon in other cultures and contexts, where possible. Furthermore, the literature lacks information on the users, operators, and prevalence of such fraudulent credentials. Similarly, we call for more research on accreditation mills and the symbiotic relationship between illegitimate credentials and accreditation. Further work is required to address this issue, which has broad social ramifications for HEIs, accreditation institutions, employers and individuals.

Conclusion

In this study, we sought to draw attention to a specific variety of illegitimate credentials and the websites that provide them, which we call Life Experience Degree Offerings (LEDOs). Rather than existing as part of the general fabric of diploma mills, it seems that LEDOs are a niche product category with unique identifying features. Diploma mills position this product as legitimate to varying degrees by preying on grey areas of academic practice. This includes extending the practice of APL to legitimise the immediate granting of higher education qualifications based on a resume or CV alone. Furthermore, these sites seek to legitimise the external value of the product offering by providing 'verification' services, and the organisation itself by relying on a facade of accreditation obtained through accreditation mills.

Our study shows similarities between LEDO and contract cheating websites, as seen in our comparative analysis. Similar to contract cheating sites, LEDO websites appear to be complex and have a substantial market supporting them (Ellis et al. 2018). However, they seem to lack some of the persuasive design features commonly found in contract cheating sites (Rowland et al. 2018). There is a great deal of variability between how these sites showcase their services, and there are fewer interactive persuasive features such as live chats found in contract cheating sites. This could suggest that the market for LEDOs is not as developed as that for contract cheating services, or conversely, that the market is so mature and efficiently fulfilling its niche that the additional benefits of technology do not equate to an increase in value or service, and thus are not required. Furthermore, while contract cheating services may be purchased in advance of a looming deadline which would necessitate higher responsiveness and customer interaction, LEDO purchases may require a quick, yet less instant response.

The findings of this study indicate that on the highest quality sites offering LEDOs, features such as money-back guarantees, detailed explanations of the value of a

higher qualification, and the use of language that prioritises verifiability, legality, and legitimacy are all employed to persuade the user. Equally, we find that there is a highly artefact-focused approach to obtaining such qualifications. Attention is placed on the physical diploma and accompanying documents, in some cases down to the materials used to typify legitimacy and quality (such as a leatherette binder). This approach prioritises artefacts as a physical confirmation of education but de-emphasises the value of education as a process itself. The key component of the value proposition is to gain value (i.e. the title and certificate) without financial cost or time commitment. This is done by presenting their case as a loophole which acknowledges that time spent in one's existing career is sufficient to obtain such qualifications. Contextually, the rapidly inflating cost of higher education (Chamorro-Premuzic & Frankiewicz 2019), along with the potential to improve one's life conditions in an uncertain and changing socioeconomic environment, may contribute to the operation of these services.

We place a high value on the educative potential of both professional and personal experience-as the adage says, 'experience is the best teacher'. However, there is a significant gap between the well-established and legitimate process of granting exemption based on earned proficiency through APL and the unverified, immediate turnaround of these websites, in which mailing a resume or curriculum vitae will result in the conferring of a degree. It is probable that such businesses prey on users' lack of familiarity with the complicated process of gaining credit for prior personal experience and may deceive them into believing that their fraudulent qualifications have value. This deception is key to understanding the difference between LEDOs and diploma mills that offer falsified testamurs and transcripts which customers are likely to use for illicit purposes.

This research has real-world implications and significance for academia, the job market, and individuals seeking to benefit from higher education. By exposing and understanding how LEDO products deceive consumers and stakeholders, and the methods by which they feign legitimacy, more concrete strategies can be developed to warn potential consumers and highlight the ramifications of engaging in this form of organised crime. Although we do not condone elitist approaches to the reputation of university qualifications and encourage inclusivity, in academia, specifically, it is imperative that we are aware that fraudulent, unearned credentials may be used to gain employment by deception. As more research develops around the LEDO product, further action can be strategised on behalf of institutions and governments to address these harmful practices.

Abbreviations

APL	Accreditation of Prior Learning
BAC	British Accreditation Council
CV	Curriculum Vitae
HEI	Higher Education Institution
LEDO	Life Experience Degree Offering
PhD	Doctor of Philosophy
RPL	Recognition of Prior Learning
SEO	Search Engine Optimization
UNESCO	United Nations Educational, Scientific, and Cultural Organisation

Availability of data and materials
Data is available on request subject to the authors' discretion.

Declarations

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