

Author Accepted Version of: McGarr O., Gavaldon G. & Saez de Adana F. (2020) 'Using autobiographical comics to explore life stories and school experiences of pre-service early childhood educators'. *British Educational Research Journal*, <https://onlinelibrary.wiley.com/doi/full/10.1002/berj.3621>

Using autobiographical comics to explore life stories and school experiences of pre-service early childhood educators.

Oliver McGarr¹, Guillermina Gavaldon² & Francisco Saez de Adana³

¹ School of Education, University of Limerick, Ireland. ²Departamento de Didáctica, Universidad de Alcalá, Alcalá de Henares, Spain. ³Instituto Franklin, Universidad de Alcalá, Alcalá de Henares, Spain

Abstract

Exploring one's life-history in order to unearth how one's past influences current conceptions of teaching is commonly employed in teacher education. Recognising the constructed and situated nature of autobiographical memory, this study examines autobiographical comics completed by pre-service early childhood educators as part of the first year of pre-service programme in Spain. Analysing the completed comics through the lens of autobiographical memory, the study found that the comics presented common general events and lifetime periods and drew on archetypal images of teaching and schools to represent their educational past. The study also found that the pre-service students drew on a common life script representing an uncomplicated journey towards educational success. The paper highlights the beliefs and assumptions that are revealed in their analysis and how teacher educators can use such resources to interrogate the social and cultural norms of the pre-service educators.

Keywords

Comics; Pre-service teacher; autobiographical memory; autobiography; life story; learner autobiography;

Introduction

The personal and professional value of unpacking one's life history, including one's educational past, is widely recognised in initial teacher education (Johnson, 2002; Chang-Kredl & Kingsley, 2014; Miller & Shifflet, 2016) as it is recognised that one's past experiences can profoundly shape how teacher education is interpreted (Cochran-Smith et al, 2012). Yet such exercises often fail to recognise the fluid and constructed nature of autobiographical memory and the situated nature of its written or verbal construction (Conway & Pleydell-Pearce, 2000). For example, completed life histories are frequently used in teacher education to encourage pre-service teachers to consider how their past influences their current and future intentions (Chang-Kredl & Kingsley, 2014; Furlong, 2013). These approaches frequently treat the recollected account as a largely fixed resource to draw from, ignoring the situated nature of its recollection and construction. Further still, as such tasks are normally presented as written tasks, this mode provides pre-service teachers with opportunities to parrot prevailing discourses about aspiring to be a teacher that are socially and culturally acceptable. These limitations point to the need for more innovative ways to encourage inquiry and help pre-service teachers reflect on their past. As a result, there has been growing interest in teacher education in the use of more visual methods, including ways of enabling pre-service teachers to unpack their past, often

drawing on art-based techniques in an effort to encourage more authenticity and insight (Weber & Mitchell, 1995; Grushka & Young, 2014; Bailey & Van Harken, 2014). Innovations in this area include the use of digital autobiographies (McTavish & Filipenko, 2016) and participatory visual methods of image capture and analysis (Parker et al, 2016). Taking an alternative perspective, but nonetheless continuing in this tradition, this paper utilises the medium of comics, however, it adds to this existing literature by employing autobiographical memory as a theoretical lens through which to analyse the completed comics. As this theoretical lens can help unearth assumptions and beliefs of the pre-service teachers that other analytical approaches cannot. This study therefore aimed to explore how pre-service early childhood educators used comics to construct their life stories, particularly how general events and lifetime periods were depicted. In addition, as aspiring educators, the study was also interested in how teaching and classrooms were visually represented. Finally, the study was also interested in exploring whether particular ‘story plots’ were presented in the overall comics’ narratives. In this way, the study aimed to explore the potential use of comics as an alternative way for pre-service early childhood educators to recall their life stories and what these life stories highlighted in terms of their past lives, values and assumptions.

Theoretical framework

Encouraging pre-service teachers to reflect on their past educational and life experiences has been common in teacher education programmes for many years (Fendler, 2003; Johnson, 2007). It is argued that such reflections are undertaken to examine how their educational philosophy and beliefs have been shaped by their past (Haught, et al., 2015; Van Hook, 2002; Furlong, 2013). Unpacking of these past experiences can also challenge the often-simplistic views of ‘good’ and ‘bad’ teaching held by pre-service teachers (de Lima et al, 2014). Through this unpacking of one’s past, it is hoped that assumptions that they hold about teaching and schools will be challenged. However, reflective tasks of this nature are not without their criticisms.

These reflections tend to view one’s recalled past as a largely fixed bank of memories. However, looking at these recollections from the perspective of autobiographical memory, viewing these recalled memories as a fixed and determined bank of experiences to interrogate is misleading. Lewkowich (2016) warns of the failure to recognise the constructed nature of all memory, including autobiographical memory. While autobiographical memory is seen by the general public as a store of past experiences that can be recalled to varying levels of accuracy depending on the individual, autobiographical memory is more constructive and fluid in nature. Conway and Pleydell-Pearce (2000) argue that autobiographical memories are the database of the self in that they contain events and recollections that provide continuity and meaning to one’s life. In this way, what one recalls about one’s life reflects as much about their present identity as their past experience. They propose the concept of the *working self*, which consists of a hierarchy of currently active goals through which current experience is encoded and memories are recalled. Therefore, what is constructed from memory is highly dependent on one’s current working-self goal hierarchy. As a result, specific past experiences may be presented as particularly important at a point in time but downplayed as unimportant on another occasion.

Memory is also used to maintain the ‘story of the self’ and in that way it also contains key memories that are particularly important to one’s life story. Singer and Salovey (1993) for example note the presence of self-defining memories, memories that have an elevated status in one’s life story. Other memories are also used to create coherence in one’s life story and to explain changes. Such ‘turning points’ (Pillemer, 1998) in one’s autobiographical narrative can be used to explain the pursuit of particular goals or explain failures and successes. However, such life stories and their construction are not simply

personally determined. As McAdams (2004) notes, ‘life stories reflect the social and cultural worlds within which lives attain their existential meanings. Therefore, life-stories are as much about the social world as they are about the self’ (p. 95). Hence what one recalls about one’s life is therefore socially and culturally bound. Therefore, what pre-service teachers recall about their past lives will be inevitably influenced by prevailing discourses of what a ‘typical’ childhood is and the manufactured notion of a *natural* childhood (O’Loughlin, 2009). This is particularly so for younger graduates as the construction of the narrative of the self begins to take place in late adolescence and early adulthood. It is at this point that the life story begins to exhibit temporal, biographical, causal, and thematic coherence (McAdams, 2004). The construction of one’s autobiographical memories not only provides coherence and justification for the present, it is also orientated towards future goals (McAdams, 2004). This complex interplay is best captured by Marsh (2003) who notes that, ‘teacher thinking is a melange of past, present, and future meanings that are continually being negotiated and renegotiated through social interaction’ (p. 6). Therefore, to see pre-service teachers’ recollections of their past lives as ‘factual’ account of their experiences downplays their constructed nature and the influence of one’s current working-self goal hierarchy.

Visual forms of expression: considering the use of comics

Teacher education has a history of visual methods both as a pedagogical tool and as a research method (Weber & Mitchell, 1995). From a pedagogical perspective, visual methods have been used to assist pre-service teachers to interrogate their beliefs and reflect on past experiences (Grushka & Young, 2014; Bailey & Van Harken, 2014). These visual images have been used to both initiate reflection (Uner, Akkus & Turan, 2012) as well as been seen as the outcome of the reflection process (Orland-Barak & Maskit, 2014). Within this domain of visual methods of expression, comics have been used in education as one mode of visual representation (Green & Myres, 2010; Rocamora-Pérez et al, 2017; Tribull, 2017). Within the area of literacy education preparation for pre-service teachers, visual techniques, including the use of digital forms of expression have also been used (McTavish & Filipenko, 2016), however it is not within the scope of the paper to explore literacy education as its focus is primarily on visual communication as a tool to unpack experiences.

Before progressing, it is important to clarify terms used from hereon, as there is a significant amount of terms used to represent the work in this genre, including the terms comics and graphic novels. Duncan and Smyth (2017) argue that graphic novels differ from comics in that they are a more extended version of comics however, this differentiation is somewhat trivial as both comics and graphic novels employ all the elements of comic construction (see Duncan and Smyth (2017) for an explanation of these aspects). Instead the authors have adopted El Refaie’s (2012) view arguing that the term ‘comics’ has been used to describe a range of different cultural objects, thus the term comics should be seen rather as a ‘vessel’ to represent the range of artforms in this area.

There are many benefits to the use of comics in teacher education as a tool to help pre-service teachers reflect on and recall their past. One of the most important relates to the potential of using comics as a motivating and accessible way for pre-service teachers to approach reflecting on their past. Reflective tasks of this nature can be seen by pre-service teachers as an ‘academic’ exercise and detached from the important teaching and classroom management skills they seek on teacher education programmes. Also, the traditionally text-dominated approaches to reflecting on one’s past can be off-putting for many students where the task may be seen as an intimidating written task that they do not have confidence in. For that reason, a visual representation of one’s past may be more appealing to a wider range of students. In addition to this benefit, the development of comics can also broaden students’ literacy by contributing to the development of their visual literacy skills thus

extending the boundaries of literacy to include multi-modal literacy (The New London Group, 1996; Dickson & Werner, 2015)

To a large extent, comics exist at the intersection of two mediums, the image and the written text (Hatfield, 2008), and as such offer innovative ways of representing one's past experiences. As Harvey (2001) notes, 'words and images blend to achieve a meaning that neither conveys alone without the other' (p. 75). In addition, comics contain a wide repertoire of techniques that can be drawn upon to extend the comic's capacity to communicate in complex and nuanced ways (McCloud, 1993). These techniques can be employed within the individual panels of the comic where, for example, the positioning of text along with images can be done to highlight contradictions or emphasise certain aspects of the text or image. The comic artist can also draw on a range of culturally and socially recognised semiotic resources for effect within panels. Moving beyond individual panels to the overall organisation of the comic, decisions around their overall layout and design, through the manipulation of panel size and gutter position (the space between panels) can be used to display (and play on) time and distance. Cause and effect can be also suggested through, what Groensteen (2007) refers to as, iconic solidarity where images acquire their full meaning through coexistence with the other images. A further example of the language comics lies in the affordances offered by the use of the comic's gutters. For example, gutters can be used to suggest a series of events between panels that are not actually shown. In these cases, the reader engages in a form of closure (McCloud, 1993) where they complete the story by filling in the gaps of the visual narrative. As well as the range of options for the layout of the comic, the visual portrayal of individual characters and objects within comics can also draw on a wide range of options and open up different possibilities for their use. Characters can be represented in various ways from highly realistic images to more abstract images. For example, highly abstract representations of characters in autobiographical comics are used to create greater universal appeal and association with the character whereas more realistic images of characters represent a more personal narrative not necessary presented for the reader to associate with. The complex language of comics therefore provides a multitude of resources for the student to represent their past lives. The complex decisions that are made in comic construction can therefore extend one's multi-modal literacy in ways that other, more traditional forms of visual representation cannot. The less serious view of comics in popular culture also provides unique opportunities for autobiographical representations of one's past that play on the subversive connotations of the comics medium (El Refaie, 2012) and express an evolving sense of identity (Kuhlman, 2017).

Autobiographical comics can range in style and layout. While many may follow, what could be described as a formalist approach that focus on the sequential ordering of events, others can challenge the structuralist approach to narrative time and utilise the flexibility of the medium to express experiences in innovative ways. Comics can also vary in relation to the dominance of text or images. McCloud (1993) for example notes a number of types, amongst them they include word specific or image specific (where one mode carries the meaning and the other plays a very minor role), interdependent (where both words and images are required for interpretation), parallel (where both text and images can exist independently) and ironic juxtaposition (where text and images, that are often contradictory, are presented intentionally for ironic purposes).

Hence comics can provide a very innovative way to express one's autobiographical experiences as, through the use of the language of comics, the student teacher has an almost limitless bank of semiotic resources and techniques of representation to draw from. For that reason, they may provide a more enriching experience for pre-service teachers to

explore their past schooling experiences and future career aspirations and disrupt the tendency to draw on stereotypical life narratives and parrot prevailing discourses.

Materials and methods

Participants and context

The participants (n = 128) were first-year student on a 4-year undergraduate degree programme in a Spanish university who volunteered to participate. The university has a tradition of teacher education providing programmes for teacher preparation across all three sectors (early childhood, primary and secondary education) at both undergraduate and masters level. The programme at the centre of this study prepared graduates to work in the early childhood education sector. Early childhood education has undergone significant changes in Spain in recent years. Originally positioned as a more vocational qualification, in recent years its status has been elevated to a more professional footing and is now positioned on a par with other teacher education qualifications. This is evident in the extension of professional preparation from 3-year vocational preparation to a 4-year university-led degree level qualification. Despite this elevation of status within third-level education, similar to early childhood education in other countries, it continues to suffer from a lack of status. This results in challenges with retention and high staff turnover in the sector (McDonald et al, 2018; Liu & Boyd, 2018). The degree programme comprised of modules on Educational Technology, psychology in education, early childhood development, special educational needs and Educational Studies. The students also undertake three school placement experiences in the final three years of the programme. The comics life-story task formed part of a compulsory module, which formed part of the educational studies modules, aimed at critically exploring the sociocultural aspects of media and develop an understanding of the different forms of communication. The study was part of an educational innovation project funded by the university.

Two of the authors of the study were located in the institution in which the research was undertaken. One was employed in the Education Department as a member of the teaching staff and delivered the module in question in which the task was undertaken, whereas the other researcher was located in another department but collaborated on the project due to their expertise in comics. The third researcher was from an external institution in another country. This research team was established as the collective experiences of the three researchers in the areas of comics, teacher education and technology and psychology, provided the different perspectives needed to explore the issue in question.

Prior to commencement of the project, written consent was obtained from the students where a commitment to safeguarding their identity and treating the research information with confidence was provided. From the onset, the students completed a survey which collected information on their reading habits and technology competencies. Of the 128 students who initially gave their consent, only 118 completed the comic work in a manner considered appropriate for analysis. The group was composed mainly of women (n = 105) and a minority of men (n = 13) whose ages ranged between 18-23 years (90%) and 10% were older than 24 years. 44% said they were not fond of reading and only 55% had ever read a comic book, mostly before the age of 14. Of the 118 students, only seven continued to read comics, but only 5 of them considered themselves fans of the genre.

Origins of the Comics task

As part of the module led by the first member of the research team, a series of activities and tutorials, delivered throughout the academic year, aimed to show the students the potential of the comic as a tool in education. The first phase consisted of a series of talks aimed at highlighting the language of comics. These tutorials were delivered by the second

member of the research team who was located in the students' university but outside of the education department. With expertise in comics, they provided 'guest' tutorials for the students in this specialist area. In this phase it was determined that most of the students were not readers of comics and, therefore, they appeared quite skeptical about the possibilities of this medium. In particular, they appeared to have poor levels of visual communication skills, reflected in their limited ability to decode visual images and their ability to convey information in the form of images. For this reason, an exercise was proposed that aimed to develop the students' visual communication capacity by focusing on their creation of images. The exercise challenged the students to present their life story in the form of a fixed-structure, one-page comic consisting of 16 panels. Notwithstanding the affordances of juxtaposing text and images in comics, the students were advised that they could not include any text in their comics. In this way, the task aimed to focus explicitly on their visual communication skills. In addition, by restricting the comic to a 16-panel structure, the cognitive load of designing the overall layout of the comic was reduced and thus the students could focus on the creation of images and not the broader structural aspects of it.

Analysis of the comics

In analysing the comics all three researchers firstly read a random sample of 8 comics together in order to identify and discuss the common themes. The comics were subsequently analysed through these main themes to identify the frequency of particular images. They included, images of relationships (including images of families, peer relationships and romantic relationships), images of achievements (including images of sport, music and travel) and images of education (including images of them as students, as teachers and images of educational achievement). These were categorised as either negative or positive depictions. Each researcher independently analysed each comic to quantify the number of such images and these numerical totals were synthesised into a composite table depicting the frequency of these images in the panels (See table 1).

	Family relationships	Peer relationship	Romantic relationships	Music	Sports	Education student	Teacher	Education Success	Travel	Independence	other
Positive images	260	60	61	19	59	163	29	60	112	26	58
Negative images	16	4	8	0	3	16	0	1	1	0	6

Table 1. Frequency of images presented in panels

As well as collating the overall frequency of the presented images the position of each type of image was recorded. As with the previous analysis, this was undertaken independently by each of the three researchers before collating this data and compiling a composite grid. This grid provided not only the frequency of particular images but also the position of them from panel 1 to panel 16, as presented below (Table 2).

Panel no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Baby	32	31	13	6	5	1	0	3	2	0	3	1	2	4	1	4
Family	27	21	25	23	16	16	13	11	7	4	7	7	5	3	5	5

Peers	0	1	2	1	3	6	5	3	4	6	6	5	3	5	5	2
Love	0	0	1	1	0	0	2	2	3	6	7	16	10	6	6	5
Music	0	0	0	2	1	0	3	2	1	3	2	1	1	1	2	0
Sports	0	1	3	4	7	7	7	9	6	4	2	1	4	0	1	1
Travel	1	1	4	3	9	10	11	8	7	11	13	7	9	9	16	0
Ed. student	2	7	11	14	20	13	11	13	22	13	8	10	9	11	10	28
Ed. Teacher	0	0	0	0	0	0	0	1	0	1	5	1	7	4	4	6
Ed. Success	0	2	1	2	0	2	3	2	3	6	6	2	6	14	7	4

Table 2. representation of images in comic panels

Results

Representation of general events and lifetime periods

In line with the literature on autobiographical memory we expected to see evidence of the two aspects of autobiographical knowledge, namely *general events* and *lifetime periods* (Conway & Pleydell-Pearce, 2000). The most significant lifetime period was the student's early years depicted in archetypal family scenes. As figure 1 highlights, the first three panels were dominated by images of babies and family and this declined significantly in in the proceeding panels. The first four panels highlight the constructed nature of memory and the use of archetypal images of the family. Given the period of childhood amnesia (Pillemer & White, 1989), it is unlikely that any of the images presented at this early stage reflect actual memories or events and it is more likely that the pre-service teachers were drawing on culturally appropriate images of families. While some metaphorical images, such as the use of a stork, were employed, the vast majority drew on images of babies, pregnant mothers and happy families as figure II highlights – largely reflecting the manufactured notion of a *natural* childhood noted by O'Loughlin (2009). In total there were 260 panels depicting happy family scenes whereas only 16 panels depicted negative family relationships and experiences.

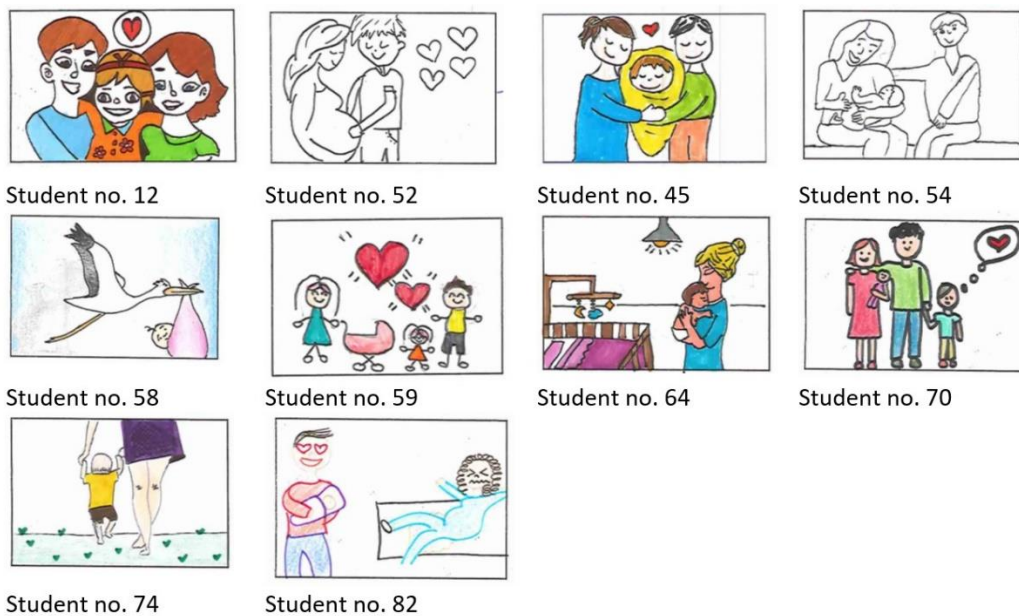


Figure 1. Depictions of family

The position of the various different types of images aligns with the gradual maturation and gaining of independence from family that one would expect. For example, as table II. above highlights, early panels were dominated by images of babies and family. This dropped as images of relationships with peers and romantic partners (Love) increased.

The second aspect of autobiographical knowledge, *general events*, were also present. These dominated the middle panels (normally panels 5 to 13) and depicted mainly positive events rather than negative events. These tended to highlight successes in sports (presented in 59 panels), music (19 panels) and educational achievements (60 panels), see figure 2 for examples. In line with understandings of autobiographical knowledge, many of these general events appeared to hold particular significance representing progress in the attainment of highly self-relevant goals (Conway & Holmes, 2010) perhaps reflecting the self-defining moments of their socio-economic group.

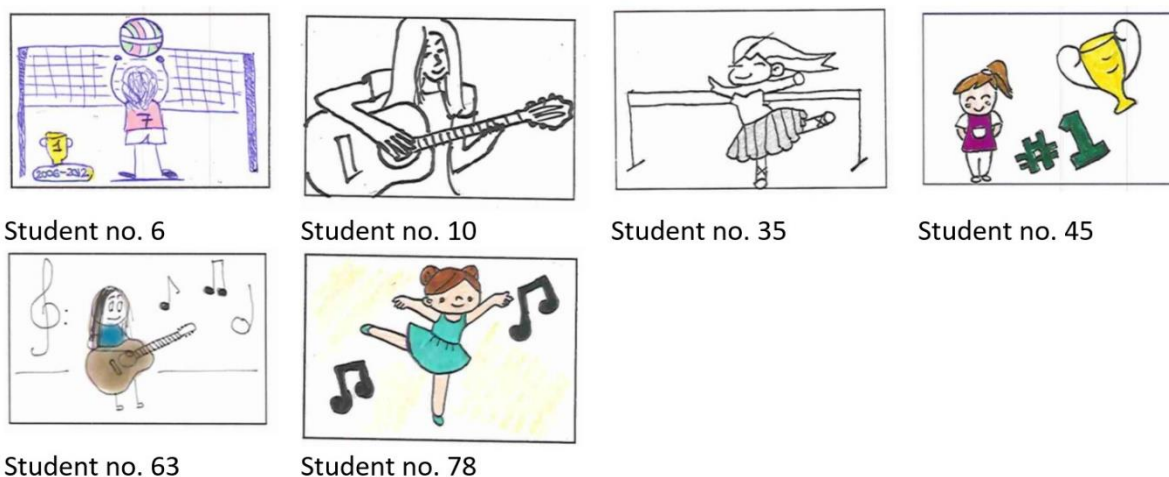


Figure 2. Examples of general events

Travel also appeared to play a significant role with many comics presenting holidays or work experience overseas (presented in 112 panels). These were normally presented in panels 9 to 12 and possibly reflect the first time than many had travelled alone or experienced a different cultural experience hence perhaps its salience in memory. Panels depicting romantic relationships with partners were also common in the latter part of the comics. In total references to romantic relationships were presented 61 times in a positive manner and 8 times in a negative way (normally highlighting the break-up of a relationship). The increase in reference to these images coincided with a decrease in images of the family indicating a move towards greater independence in adolescence. No same-sex relationships appeared to have been presented.

Whilst some of the panels representing general event memories may have been simply used to present typical lifetime events such as starting school, other appeared to be used to present particular turning points in their lives. These self-defining moments (SDMs) (Singer & Salovey, 1993) are highly specific events that are often turning points in the life of the individual (Pillemer, 1998). These can be both positive and negative events and are used to indicate a change in goals as a result of the experience. Turning points that were presented in a positive way included educational success (normally depicted as a graduation ceremony (see figure 3.)). A notable feature of these images is their consistency in their representation of educational achievement and enjoyment, hence for this group it could be argued that educational achievement is deeply rooted in their working-goal hierarchy.

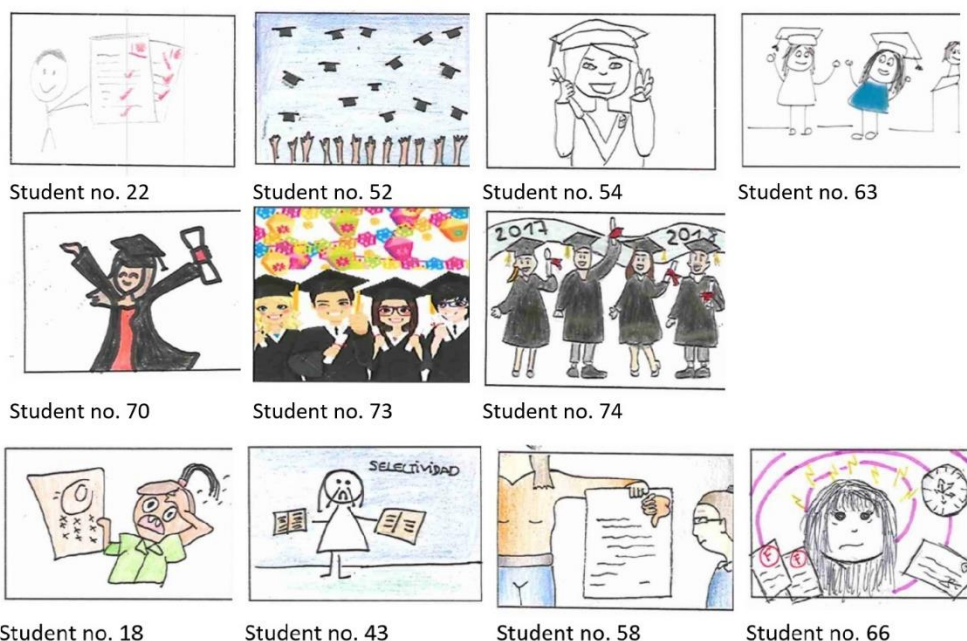


Figure 3. Examples of educational success and failure

However, there were also events that were presented as turning points that were more negative. For example, some comics presented images of family break-up or the death of a family member however these were infrequent.

Negative educational experiences were also presented (in 16 panels) but given the number of panels representing education these were quite limited. Nonetheless they depicted examples of failure in examinations and not achieving educational goals (see figure 3.). Notably, the number of educational failures presented was low relative to the number of positive images.

Representation of teaching and classrooms

The second aspect of our analysis involved exploring the student teachers' representations of schools and teaching as how one experienced education can influence how one conceives their professional role as a teacher (Lortie, 1975; Sugrue, 2004). To do this we noted all panels that depicted educational scenes, these were either scenes of the student teacher studying individually or within schools and classrooms. A notable aspect of these images was how the type of educational environment different with age groups and the consistency in the images used to represent classroom practices. When recalling their early experiences of schools or when they were depicting scenes of them working as early childhood educators they tended to draw on very maternal images of the teacher (figure 4).

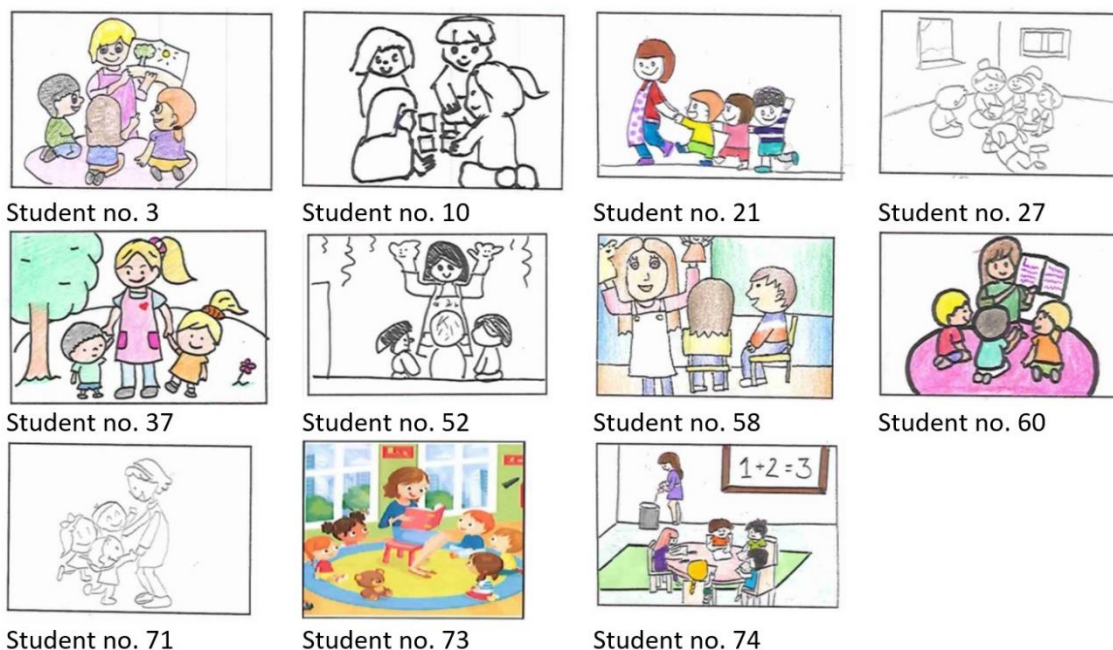


Figure 4. Representations of early childhood education

Classrooms from primary school were presented in a more traditional manner with typical educational markers such as blackboards and desks (Weber & Mitchell, 1996). When depicted, the students were normally passively sitting whereas the teacher was normally in a dominant position standing at the blackboard instructing the students (see figure 5). Only one negative image of school was depicted in all the representations presented.

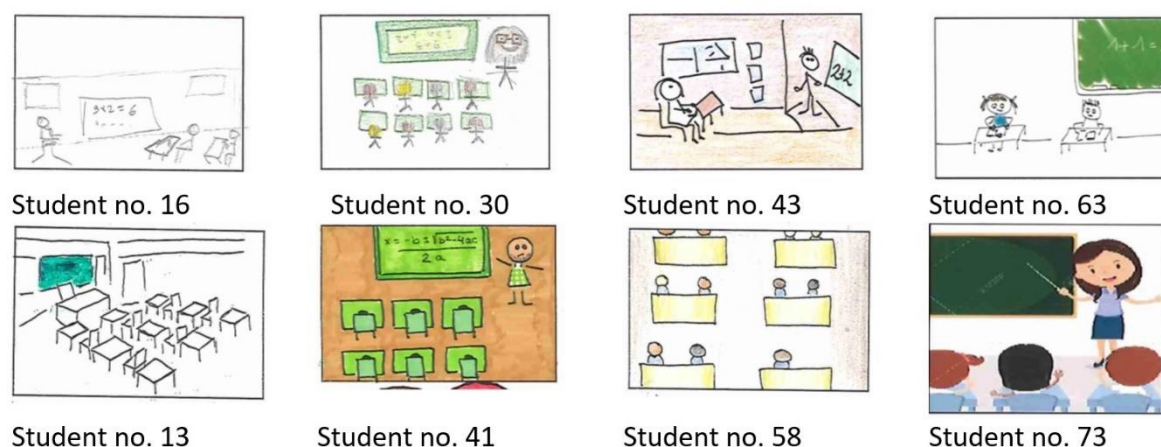


Figure 5. Images of primary schools

Story plots

As the students were a cohort of young-adults, we expected to see the emergence of story plots within the constructed comics. For example, in exploring the way American adults construe their lives as stories, McAdams (2004) notes the American story of redemption claiming that, 'a key feature of redemptive life stories is the transformation of personal suffering into positive-affective life scenes that serve to redeem and justify one's life' (p. 96). We had noted the presence of several negative educational experiences (16 panels in total) normally depicting failure in examinations which may have been the catalyst for a transformation, however, these did not 'fit' the typical redemptive story plot. In a number of the comics the student did present the challenge of studying (see figure 6), normally prior to success in exams but these examples were not particularly frequent, and indeed in

some cases images of students studying was not presented as problematic but rather a normal part of their journey towards university, as the examples below highlight.

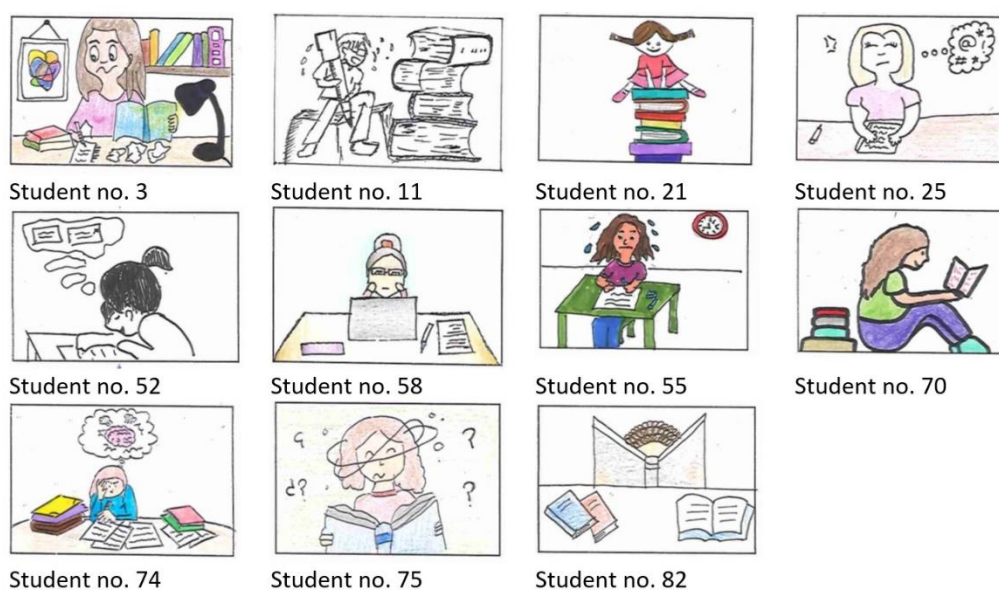


Figure 6. Examples of studying

There was however a story plot of sorts common in most comics. This plot commenced with an idyllic family upbringing and was followed by a number of general event memories typical of childhood that represent rites of passages and self-defining moments in western culture. This period of general positive experiences was normally followed by moves towards greater independence represented by travel, gaining one's driving licence, falling in love or graduating from high school. The story normally ended with the student representing themselves as being in university. The overall narratives presented seemed to present their progression to teaching in quite a neutral and uncomplicated way. Few presented their current position as an initial teacher education student as their ideal destination in their narrative and there were only a small number of examples where their love of teaching was presented.

Discussion

The pre-service teachers' representations of their past lives have raised many questions. Looking at the comics through the lenses of autobiographical memory and visual archetypes of teaching, there are a number of ways of interpreting the data, so it is worth considering just what is going on in these representations.

At one level it could be argued that the comics task has not helped the pre-service teachers to move beyond simplistic representations of their past or of teaching. They continue to draw on the, 'deep seated archetypes of teaching that pervade the wider culture' (Hargreaves & Jacka, 1995, p. 44). Hence, it could be argued that the comics task, while appearing novel, has simply provided another opportunity to present stereotypical views of teaching and schools and therefore reflects the findings of similar studies drawing on visual representations. For example, in their seminal work on pre-service teachers' visual representations of teaching, Weber and Mitchell (1996) noted that;

Although they were free to draw any teacher, real or imagined, most of them [the pre-service teachers] chose to draw themselves as a teacher, often in the form of an ideal projection. Most of those who did not draw themselves drew a teacher they remembered, or made a composite "image" of teachers they had known. (p. 305)

Hence the study again reiterates the deeply rooted cultural archetypes of teaching (Stigler & Hiebert, 1998) held by pre-service teachers and the imprint that the dominant pedagogies in schools has on pre-service teachers (Lortie, 1995; Sugrue, 2004). One could also argue that in relation to other aspects of their autobiographies, such as their family lives and significant events, they also drew on idealised stereotypes to present their past. This begs a couple of questions: has the comics' task simply provided a novel medium through which to present an idealised account of one's past drawing on visual archetypes of teachers, schools and life events? If so, how authentic are these accounts?

It is possible to interpret the comics task in this limited way, particularly if one views the completed comics at an individual panel level, where each image is viewed in isolation. However, comics are not simply a collection of independent images, they provide a series of images that need to be viewed as a collective to interpret the narrative that is constructed. Looking at the completed comics from this perspective reveals the unique affordances of the comic's medium and the task provided to the students. While the student may indeed be drawing on stereotypical images of schools, family, teachers and other events to populate individual panels of the comic, viewed in their entirety as an overall narrative highlights the overall story plots and the significant general events and their lifetime periods. It could be argued that these stereotype images are 'borrowed' to help construct their autobiographies, similar to how images/photos can be used in a collage to depict a story – transcending the significance of any individual image. Hence at an individual level of the panel image, the pre-service teachers draw on stereotypes to depict their biographies but at the level of the overall comic, the narratives reveal something more authentic beyond archetypal depictions. Looking at the comics in their entirety, they highlight peaks and troughs of their biographies and highlight the events they consider significant in their lives. In addition, the similarity of the story plots and the significant lifetime events highlights the similar cultural and social backgrounds of the cohort. This, it could be argued, provides a unique insight beyond written reflective accounts or traditional visual-based work drawing on single images.

Before exploring the implications of this study, it is worth exploring the extent to which the 16-panel limit of the comic and the restriction of the task to only images limited the students' potential to fully explore the potential and capacity of the comics medium to express the nuances and complexities of their life stories. The fixed panel structure could be seen as a way to scaffold the student in a task that they are unfamiliar with. For example, setting the temporal sequencing of the comic structure enabled students to think more about the content of each panel but, this may have contributed to the stereotypical images of childhood and the absence of more critical representations. On the other hand, it is perhaps ambitious to expect that the students would master the complex language of comics in a short time and that the comics produced are not a result of the task limitations but instead reflective of the students' (in)experience of producing comics. Given how challenging the students reported the task to be, it is possible that leaving the task as an 'open' comic task without any restrictions may have posed additional challenges for the students.

From a methodological perspective, it is also worth reflecting on how the analysis of the autobiographical accounts has mediated the data. It could be argued that the reduction of these visual autobiographical accounts to key themes by the research team, and the subsequent categorisation of these events as either positive or negative, is a limitation of the study as it has arguably reduced these complex autobiographical accounts to quantitative frequencies determined by the subjective interpretation of the research team. That being said, looking at the comics from the lens of autobiographical memory, the purpose of the research was to explore how general events and lifetime periods were depicted and restricting the comic to the 16-panel structure, to some extent has compelled

the participants to be selective and explicit in their representation of these events. So, rather than the researchers interpreting these events as significant, the depicted events must have been identified as significant events by students themselves for them to be selected in the first place. Our categorisation of these events as either positive or negative is open to critique however, as such judgements are drawn from our own life histories and what, as a result of our educational and life experiences, are considered positive and negative. Further research of this nature could request students to subsequently analyse their own autobiographical comics to self-identify both positive and negative events.

Implications

The study has revealed, in a visual form, the homogenous nature of the pre-service teachers' lives. They drew on the cultural scripts of the 'ideal' family, 'ideal' relationships and the 'ideal' educational journey to construct their biographies in a taken-for-granted uncritical way. This homogeneity is not unique to this cohort however;

All teachers, irrespective of their social or cultural background, enter universities and the workforce with their habitus bound to their own distinct class-constructed values and related ideology ... because teaching has historically been, and largely continues to be, a white, middle-class occupation, many teachers enter university with markedly similar backgrounds. (Lampert et al, 2016, p.36)

Lambeth and Smith (2016) note that over the past number of decades, schools have become more culturally diverse which has widened the cultural divide between pre-service teachers and their pupils. This, they contend, has resulted in pre-service teachers being unprepared to teach pupils whose life experiences differ from their own. Therefore, a core aim of teacher education for a number of decades has been in helping pre-service teachers to recognise their own cultural background and assist pre-service teachers in questioning the assumptions embedded in the retelling of this biography. Embedded within this recollection may be culturally specific views of the family and the importance of education. Such recollections also intersect with one's views of sexuality, social class and meritocracy (Neary et al, 2018; Lambeth & Smith, 2016). The self-defining moments presented, such as achievements in music, sport and dance, as well as opportunities to travel reflect the privileges of middle-class that may be far from the experience and biographical narratives of their future pupils. Therefore, for teacher educators, these comics provide a unique window into the value system of their students.

Lambeth and Smith (2016) argue that a major trend in the teacher education literature is in developing strategies to diminish the cultural boundaries between teachers and pupils. Therefore, they add, future research studies should explore how pre-service teachers reflect on their own culture and assess how their past experiences influence their practice. We contend that the use of autobiographical comics are ideal vehicles to achieve this in teacher education as they provide a visually accessible way for pre-service teachers to both represent their past and subsequently interrogate the cultural and social norms embedded within them. We argue that future work should challenge the student teachers to explore the story plots that are depicted in their comics and consider how these narratives have been shaped by the social and cultural norms of their upbringing. This can facilitate opportunities for student teachers to consider how their own personal histories have shaped how they represent their lives. Used in a sensitive and careful manner, this can help them recognise that events that they may believe are universally experienced by all, are instead unique to particular social or cultural group. They can also begin to recognise how they have privileged some life-events over others and how particular beliefs and values have led to these prioritisations. This in turn can help pre-service teachers to recognise and value alternative story plots that do not fit with the traditional story plots typically depicted by

successful students that progress to third-level education (and teacher education in particular). In saying that, given the homogenous nature of teacher education students, it could be difficult for students to experience vastly different story plots within their own cohort of students. For this reason, teacher educators may need to ensure that they are exposed to a diversity of autobiographical accounts beyond their own peer groups.

There are also implications arising from this research related to the visual representations and archetypes of teaching and schooling. The idealised depiction of past teachers and the idealised representations of their own teaching practices (that are presented at a panel level) can also be used as a powerful resource by teacher educators to interrogate and unpack the pre-service teachers' images of teaching. Displaying the highly similar images produced in relation to teachers and schools, despite the different backgrounds of the students, can highlight the archetypes of teaching that are drawn on by all students and help them to recognise the constructed nature of their image of teaching and schools.

Conclusion

This research study set out to explore three related aspects, 1) how, through the lens of autobiographical memory, pre-service teachers' general events and lifetime periods were depicted in comics, 2) how teaching and classrooms were visually represented in their completed comics and 3) whether the pre-service teachers drew on similar 'story plots' in recalling their life stories. As the study has highlighted, the use of comics appears to be a good way for pre-service teachers to recall their life stories. While the majority had little or no previous experience of comics, they successfully completed the task. Their comics contained all of the elements one would expect from a recalled autobiographical memory including self-defining moments of high and low points, general events and lifetime periods and a greater progression towards independence and autonomy. Hence it can be concluded that comics are an effective and relatively easily-mastered medium to represent life stories for pre-service teachers.

The study also highlighted that the comics drew on many visual archetypes to represent their stories including visual archetypes of childhood, family, school and relationships that were universal in nature. Thus, the recollections were constructed through these stereotypical images. At a broader level, the overall life narrative presented across the 16 panels also appeared to draw from a common script involving happy family life, moves towards greater independence through achievement in areas such as sport, music and education, before arriving at university and teacher education. The constructed and visual nature of both the individual images and the overall story plot provides a unique opportunity for teacher educators to use such completed comics with their students to interrogate the archetypes they draw from in framing and constructing their past and explore the taken-for-granted journey of educational success presented in their comics. We argue that this use of comics, while in its infancy in teacher education, hold enormous potential in facilitating more critical reflections for pre-service teachers.

Data Availability

Research data are not shared.

Ethical Guidelines

After providing full details of the study and its voluntary nature, written consent was obtained from the students interested in participating. A commitment to safeguarding their identity, and treating the research information with confidence, was provided to all students. Student work was subsequently anonymised ensuring no personal information

was reported in the comics to protect the identity of the research subjects. The individual reporting of the comics at the level of panels also ensured that no single biography is presented in the findings.

Conflict of Interest

There is no conflict of interest in the reporting of this study

References

- Bailey, N. M., & Van Harken, E. M. (2014). Visual images as tools of teacher inquiry. *Journal of Teacher Education*, 65(3), 241-260. doi:10.1177/0022487113519130
- Chang-Kredl, S., & Kingsley, S. (2014). Identity expectations in early childhood teacher education: Pre-service teachers' memories of prior experiences and reasons for entry into the profession. *Teaching and Teacher Education*, 43, 27-36.
- Cochran-Smith, M., Cannady, M., McEachern, K. P., Viesca, K., Piazza, P., Power, C., & Ryan, A. (2012). Teachers' education and outcomes: Mapping the research terrain. *Teachers College Record*, 114(10), 1-49.
- Conway, M. & Holmes, E. (2010) Autobiographical Memory and the Working Self, in Cognitive Psychology, H. Kayne (Ed), The Open University, Milton Keynes. (227-263)
- Conway, M. A. & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review*, 107 (2), 261-288. 10.1037/0033-295X.107.2.261
- de Lima, M.P., Rebelo, P.V. & Barreira, C. J (2014). Teacher Development: Contributions of Educational Biography and Personality. *Journal of Adult Development*, 21, (4), 216-224. DOI: 10.1007/s10804-014-9193-y
- Duncan, R., & Smith, M. J. (2017). How the graphic novel works. In Tabachnick, S. (Ed) *The Cambridge companion to the graphic novel*, 8-25. Cambridge University Press: Cambridge
- El Refaie, E. (2012). *Autobiographical comics: Life writing in pictures*. Univ. Press of Mississippi.
- Fendler, L. (2003). Teacher Reflection in a Hall of Mirrors: Historical Influences and Political Reverberations. *Educational Researcher*, 32 (3) 16-25.
- Furlong, C. (2013). The teacher I wish to be: Exploring the influence of life histories on student teacher idealised identities. *European Journal of Teacher Education*, 36(1), 68-83.
- Green, M. J., & Myers, K. R. (2010). Graphic medicine: use of comics in medical education and patient care. *BMJ: British Medical Journal (Online)*, 340.
- Groensteen, T. (2007). *The system of comics*. Univ. Press of Mississippi.
- Grushka, K. & Young, B. (2014) Using arts-based methods in preservice teacher education: Perzine pedagogies. *Studying Teacher Education*, 10(3), 275-289, DOI: 10.1080/17425964.2014.949655
- Hargreaves, A., & Jacka, N. (1995). Induction or seduction? Postmodern patterns of preparing to teach. *Peabody Journal of Education*, 70(3), 41-63.
- Harvey, R. (2001) "Comedy at the Juncture of Word and Image: The Emergence of the Modern Magazine Gag Cartoon Reveals the Vital Blend," by Robert C. Harvey, in *The Language of Comics: Word and Image*, 75-96, eds. R. Varnum and C. T. Gibbons (University Press of Mississippi, 2001).

- Hatfield, C. (2008) how to read a ...” English Language notes, Special Issue (Graphia: The Graphic Novel and Literary Criticism) 46(2): 129-49
- Haught, P. A., Nardi, A. H. & Walls, R. T. (2015). Preservice Teachers’ Academic Memories of School: A Tool for Learning. *American Journal of Educational Research*, 3 (2), 166-172. DOI: 10.12691/education-3-2-9
- Johnson, L. (2002). “My eyes have been opened” White teachers and racial awareness. *Journal of Teacher Education*, 53(2), 153-167.
- Johnson, A. S. (2007). An ethics of access: Using life history to trace preservice teachers' initial viewpoints on teaching for equity. *Journal of teacher education*, 58(4), 299-314.
- Kuhlman, M. (2017) The autobiographical and biographical graphic novel. In Tabachnick, S. (Ed) *The Cambridge companion to the graphic novel*, 113-129. Cambridge University Press: Cambridge
- Lambeth, D. T., & Smith, A. M. (2016). Pre-service teachers’ perceptions of culturally responsive teacher preparation. *The Journal of Negro Education*, 85(1), 46-58.
- Lampert, J., Burnett, B., & Lebhers, S. (2016). ‘More like the kids than the other teachers’: One working-class pre-service Teacher’s experiences in a middle-class profession. *Teaching and Teacher Education*, 58, 35-42
- Lewkowich, D. (2016) Teacher Education in Memory's Light and Shadow: Autobiographical Reflection and Multimodalities of Remembering and Forgetting, *Educational Studies*, 52:6, 573-591, DOI: 10.1080/00131946.2016.1231682
- Liu, Y. & Boyd, W. (2018): Comparing career identities and choices of pre-service early childhood teachers between Australia and China, *International Journal of Early Years Education*, DOI: 10.1080/09669760.2018.1444585
- Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- McDonald, P., Thorpe, K., & Irvine, S. (2018). Low pay but still we stay: Retention in early childhood education and care. *Journal of Industrial Relations*, 60(5), 647-668.
- Marsh, M. M. (2003). *The Social Fashioning of Teacher Identities. Rethinking Childhood*. Peter Lang Publishing, New York.
- McAdams, D. P. (2004). The redemptive self: Narrative identity in America today. *The self and memory*, 95-115.
- McCloud, S. (1993). *Understanding comics: The invisible art*. New York. Harper Perennial
- McTavish, M., & Filipenko, M. (2016). Reimagining Understandings of Literacy in Teacher Preparation Programs Using Digital Literacy Autobiographies. *Journal of Digital Learning in Teacher Education*, 32 (2), 73-81, DOI: 10.1080/21532974.2016.1138914
- Miller, K. & Shifflet, R. (2016). How memories of school inform preservice teachers' feared and desired selves as teachers. *Teaching and Teacher Education*, 53, 20-29. 10.1016/j.tate.2015.10.002.
- Neary, A., Gray, B., & O’Sullivan, M. (2018). Lesbian, Gay and Bisexual teachers’ negotiations of civil partnership and schools: ambivalent attachments to religion and secularism. *Discourse: Studies in the Cultural Politics of Education*, 39(3), 434-447.

- O'Loughlin, M. (2009) *The subject of childhood*. Peter Lang, New York.
- Olsen, B. (2008). How reasons for entry into the profession illuminate teacher identity development. *Teacher education quarterly*, 35(3), 23-40.
- Orland-Barak, L., & Maskit, D. (2014). Taking a stance through visual texts: novice teachers as educational agents. *International Journal of Qualitative Studies in Education*, 27(3), 330-348. doi:10.1080/09518398.2012.762481
- Parker, M., Patton, K. & Sinclair, C. (2016) 'I took this picture because ... ': accessing teachers' depictions of change, *Physical Education and Sport Pedagogy*, 21:3, 328-346, DOI: 10.1080/17408989.2015.1017452
- Pillemer D. B. (1998) *Momentous Events, Vivid Memories*. Cambridge, MA: Harvard University Press;
- Pillemer, D. B., & White, S. H. (1989). Childhood events recalled by children and adults. In *Advances in child development and behavior* (Vol. 21, pp. 297-340). JAI.
- Rocamora-Pérez, P., López-Liria, R., Aguilar-Parra, J. M., Padilla-Góngora, D., del Pilar Díaz-López, M., & Vargas-Muñoz, M. E. (2017). The Graphic Novel as an Innovative Teaching Methodology in Higher Education: Experience in the Physiotherapy Degree Program at the University of Almeria. *Procedia-Social and Behavioral Sciences*, 237, 1119-1124.
- Singer, J.A., & Salovey, P. (1993). *The remembered self: Emotion and memory in personality*. New York: Free Press
- Stigler, J. W., & Hiebert, J. (1998). Teaching Is a Cultural Activity. *American Educator*, 22(4), 4-11.
- Sugrue, C. (2004). Revisiting teaching archetypes: identifying dominant shaping influences on student teacher's identities. *European Educational Research Journal*, 3(3), 583-602.
- Tribull, C. M. (2017). Sequential science: A guide to communication through comics. *Annals of the Entomological Society of America*, 110(5), 457-466.
- Uner, S., Akkus, H., & Turan, N. (2012). Image Yourself as a Chemistry Teacher. *Procedia - Social and Behavioral Sciences*, 47, 417-421. doi:https://doi.org/10.1016/j.sbspro.2012.06.673
- Van Hook, C. (2002) Preservice teachers reflect on memories from early childhood. *Journal of Early Childhood Teacher Education*, 23 (2), 143-155, DOI: 10.1080/1090102020230206
- Weber, S. & Mitchell, C. (1995) *That's funny, you don't look like a teacher! interrogating images and identity in popular culture*. London ; Washington, D.C. : Falmer Press 1995
- Weber, S., & Mitchell, C. (1996). Drawing ourselves into teaching: Studying the images that shape and distort teacher education. *Teaching and Teacher Education*, 12(3), 303-313.