Re-thinking Assessment: multimodality, literacy and computer-mediated learning

CAREY JEWITT
Institute of Education, University of London, 20 Bedford Way, London WC1H 0AL, UK

ABSTRACT All teaching and learning in the school classroom involves a range of modes including speech, writing, gesture, gaze, body-posture, movement, and so on—in other words teaching and learning are multimodal. This is as true of school English, where common-sense would have it that teaching and learning are fully realised in language, as it is of school Science where the role of action is firmly established in the curriculum. While all teaching and learning is multimodal, the use of computers in the classroom serves to emphasise the multimodal character of pedagogy. Computer applications introduce new kinds of texts into the classroom and these demand different practices of students. In turn this suggests the need to re-think conceptions of literacy, learning and assessment—to move beyond the narrow definition of literacy apparent in recent government policy to a broader definition that realises the connections between literacy and social practices in a multimodal digital era. The questions raised by the move from a language-based curriculum to a multimodal curriculum are explored in this paper through an illustrative example of computer mediated learning in the school English classroom.

Introduction

A multimodal perspective on pedagogy raises a number of issues for pedagogy, literacy, learning and assessment. This paper explores these through the analysis and discussion of an illustrative example of computer mediated learning in a school English classroom.

Multimodal research shows that talk is not always the primary mode in the secondary school science classroom and the same seems to hold true for the English classroom (Kress et al., 2001; SEP, 2002). A complex of modes including talk, visual communication, action, gesture, gaze, posture and movement contribute to teaching and learning. The point I wish to make is not only that there is a range of modes in play in classrooms across the curriculum but that the affordances of different modes shape (produce) curriculum entities in specific ways. In other words, the different modes available on the social plane have different socially shaped (and material) potentials or affordances for ‘carrying information’.

The multimodal character of the classroom is also central to how students learn
Different modes demand different intellectual work from pupils and this work ‘fills up’ the concepts to be learnt in different ways (Scott & Jewitt, in press). The range of representational resources made available through visual communication (spatial relations, colour, etc.), for example, enable the expression of kinds of meaning that would be difficult, or perhaps impossible, in language (Jewitt et al., 2000).

Quite new modal realisations are now the bearers of ‘that which is to be learnt’ and this requires that which is to be learnt to be examined in analogous modes. If learning is multimodal and assessment is restricted to the modes of speech and writing the assessment will ignore (and in the process negate) much of what is learnt. When students learn with computers, what is to be learnt is newly configured by the availability of modes and their arrangement on the computer screen (Jewitt, in press). In this paper I show how what is to be learnt is re-shaped in the move from page to screen and ask what this might mean for assessment.

Attending to the range of representational and communicational modes in the classroom and how these contribute to teaching and learning has implications for traditional conceptions of literacy as competencies in reading and writing. The government National Literacy Strategy (DfEE, 1998) is, for example, informed by a language print-based conceptualisation of literacy—the focus is on ‘word’, ‘sentence’, and ‘text’. Indeed recent government initiatives seem determined to focus on the concept of literacy in its most restricted sense, while outside of the school young people are “reading” and “writing” across a new terrain, redefining what literacy might mean’ (Raney, 1998, p. 37). While the visual and the linguistic can be treated as distinct versions of literacy to be attended to, that is visual literacy and written literacy, I want to argue that a re-thinking of the whole complex of representation is required. Kress (2000) argues for the need to have a concept of literacy as a multimodal process in which all modes are critically interpreted, and their interactions considered. This leads to shift from a conception of competence in literacy to one of literacy as multimodal ‘design’.

Multimodality also challenges the assumptions about learning (as a linguistic process) and the traditions embedded in educational assessment. The multimodal character of teaching and learning means that each student is involved in making personal sense of the combination of modes as they are organised in the classroom. The task before the student is to know what signs from this multimodal ensemble, or their experiences in the classroom, to include and what to exclude from their accounts in order to construct an appropriate response (or text) for assessment. The student is involved in the complex work of processing information starting with the multimodal resources available in the classroom and moving to a more restricted modal response in the form of writing. What it means to be literate is becoming increasingly ‘complex and elusive’ (Beavis, 1998) and this raises the questions for the assessment of ‘multimodal’ literacy and learning.

The multimodal character of computer mediated learning brings these issues to the fore. First, in the move from page to screen a range of representational modes (including image, movement, gesture, music, sound-effect, and voice quality) are available as meaning-making resources and these are newly configured on screen.
The prominence of image and animated movement in the majority of educational computer applications highlights the question of what contribution these resources make to teaching and learning, and what resources are best suited for what tasks (Lanham, 2001). The multimodality of the screen also raises the question of what literacy is (or can be) and what it means to be literate in a digital era (Kress, 2003). Although ICT is positioned within literacy policy as a useful learning tool, how the multimodal character of computer mediated learning reshapes traditional (print-based) concepts of literacy are not addressed.

Computer mediated learning raises a second reason for different forms of assessment. Traditional forms of assessment (in line with government notions of literacy) place an emphasis on handwriting and spelling—skills that are less relevant (or differently so) when using a computer. At the same time the acquisition of new skills such as finding, selecting, processing and presenting information from the internet and other sources in a coherent manner are not credited and are seen to stand outside of literacy (Somekh et al., 2001).

Through the multimodal analysis of the move of the Steinbeck novel Of Mice and Men (1937) to a CD-ROM (Steinbeck Series, 1996) (i.e. from page to screen) I explore the issues of literacy, learning and assessment in the context of computer mediated learning in school English. I demonstrate that the shift from written page to multimodal screen entails a shift in the construction of the curriculum entity ‘character’. This analysis shows that student interaction with the multimodal resources of the CD-ROM demand that ‘reading’, literacy, and the process of learning (and therefore assessment) within school English can be thought of as more than a linguistic accomplishment.

Computer Mediated Learning in School English: an illustrative example

This paper draws on video and observational data from a series of five English lessons with a Year 10 class (students aged 14–15 years) at an Inner-London secondary school. These lessons focus on the study of Steinbeck’s novel, Of Mice and Men, a set text in the English GCSE curriculum. The entity ‘character’ is central to school English. It is highlighted by the emphasis on character throughout the history of English (Kermode, 1979; Eagleton, 1983) and its prominence in the National Curriculum. The study of set texts is a central element of school English and GCSE English course-work and examination includes the demand for responding to a set text by recommended major authors. ‘Character’ is highlighted as a core entity in The English National Curriculum programme and assessment schema. Understanding character is, for instance, explicitly specified as central to a critical and creative response to a range of texts. Students are expected to demonstrate how ‘character’ is constructed through an author’s choice and style of language. Students are also assessed on their ability to make comparisons between the characters in a text and their role in the narrative, and to demonstrate the motivation and behaviour of a character through the analysis of a text (DfEE, 1999). Character is also central at a more local level in the course-work set by the teacher—to write ‘a day in the life’ of a character from Of Mice and Men.
The CD-ROM, *Of Mice and Men* (Steinbeck Series, 1996) is organised into five parts: Novel as CD-ROM, Dossier, Biography, Map, and Diary. The first two parts of the CD-ROM are focused on in this paper. These five parts of the CD-ROM draw on a range of modal resources in order to focus on discrete aspects of the study of a text. The ‘Novel as CD-ROM’ offers two viewing options titled, ‘Text’ and ‘Visual’. The Text option, as the title suggests, is a written text. The ‘Visual’ option is in fact multimodal and uses a range of aural and visual modes.

This paper focuses on the Visual option of the ‘Novel as CD-ROM’ as it is the default option on the CD-ROM and the option used by the students in the lessons observed. In exploring the modal realisation of character on screen I treat the ‘Novel as CD-ROM’ as a transformation of the printed novel. The CD-ROM is the product of designer’s modal re-shaping of the character from the mode of writing to the multiple modes of the screen. The transformation of the novel, *Of Mice and Men*, from printed page to electronic screen via the CD-ROM draws on the modal resources of image, sound, and action in three ways. First, the transformation of writing into multimodal video clips in each chapter using voice, music, movement, body-posture, gesture, clothes, composition, and editing. Second the addition of still image throughout the ‘Novel as CD-ROM’. Third, the additions of the video character guide, ‘Bindy’, to the ‘Novel as CD-ROM’.

I first describe the multimodal transformation of the entity character in the move from page to screen and then discuss how these modal resources are a part of the shaping of the students’ ‘reading’ of character and the novel (Graddol & Boyd-Barrett, 1994).

**Writing to Multimodal Video Text**

The ‘Novel as CD-ROM’ opens with a short video clip. It shows the characters George and Lennie sitting by a campfire, talking. The video draws on a range of modes including the visual representation of gaze, gesture and movement, distance of shot, point of view, clothes, design, speech and voice quality.

The representation of the two characters’ body posture, movement, gesture, and gaze in the video clip serves to polarise them. The character George is represented as still, his gaze is steady, and his posture relaxed (his body stretched out) physical qualities associated with calmness, and stability. His leaning in toward Lennie and his close social distance serve to display an intimate engagement with Lennie. George’s soft rolling gesture is slow and gently a sign of control and ease. In contrast the movement (springing, lunging), gaze, and ‘prodding’ gestures of the character Lennie represent him as unsettled, volatile, and unaware of danger (leaning across the fire). The posture of Lennie, his legs pulled tight into his body is a closed tight one, and as he springs his legs forward the tension of the character is signalled. The jerky gestures of Lennie are fast and forceful and indicate both his power, and his lack of control. George is depicted as gazing at Lennie, a transactional reaction in which Lennie is the goal. In contrast Lennie’s gaze at George is wavering and darts around at the woods, his gaze is unclear, and unfocused suggesting a lack of
concentration. This transformation of the characters serves to reinforce the rational adult character of George and the emotional child-like character of Lennie—who literally ‘can’t sit still’. This construction of the characters through actional modes shapes the viewer’s relationship to the characters and understanding of their relationship.

The resource distance of shot is used to indicate the relationship between George and Lennie [1]. The increased closeness of the shots in the video clip realises the characters’ relationship, and perhaps the potential claustrophobia of George as Lennie gestures towards him (and the viewer). The camera encodes a viewing position, both in terms of distance, and in angle of representation—although this can be rejected by the viewer (Rose, 2001). Nonetheless, viewing positions are encoded in an image and are one basis for the negotiation of meaning. The degree of angle and distance used in the video clips visually constructs viewer empathy with the character George’s ‘experience’ and the objectification of the character of Lennie. It also serves to polarise further the characters visually.

Clothes are used as social marker of visual difference. Lennie is dressed in clothes that are traditionally worn by children and in the era of the book, the working classes—light coloured flat cap and dungarees. George is dressed in clothes generally worn by adults—dark brimmed hat, shirt, jacket and trousers. That is, their clothes are associated with the power of social position, child and adult. In this way, clothes are visual signs used to suggest Lennie’s dependence on George. In this way, the nature of the friendship between George and Lennie is visually placed in the context of ‘family’—which reduces the potential for their friendship to be read by a contemporary audience as a gay relationship.

Composition and editing are means for the visual design (or organisation) of a range of modes in the video clips. They provide a range of resources for the arrangement of elements in a visual space, in this instance the visual space of the screen. The character Lennie’s movement from the ‘zone’ of the screen that he occupies into the ‘zone’ of the screen occupied by George disrupts the equilibrium of the visual arrangement of spatial zones. The editing serves to emphasise Lennie’s disruption of George’s space further with a shift in viewer distance and angle. Compositionally it is Lennie who dominates the space of the screen and who is visually foregrounded. Lennie is represented as ‘breaking’ the spatial framing/boundaries of the screen. The character Lennie is represented as disruptive through his movement in this compositional space. The stillness of George and his boundaried spatial framing add to the multimodal construction of his character as ‘stable’.

The representation of the characters’ through voice quality is the result of choices from a range of aural possibilities, choices that carry meaning. The slow rhythm, normative level, and evenness of George’s voice quality combine to form a sign of calmness and stability. The fast and faltering quality of Lennie’s voice signal the value of instability and lack of control: the exaggerated stutter serves to remove any sense of clarity. This use of voice emphasises the contrast between the two characters, and marks Lennie’s lack of control and potentially dangerous nature from the
start. This provides a less sympathetic view of Lennie and places the relationship of
Lennie and George in the context of control and power rather than friendship.

The multimodal resources of the video clip as they appear on the computer screen
reshape the two characters, and present the students with different resources for
their construction of character. As the video clip described above ends, the screen
fades to black, and a new screen appears.

**Written Text to Visual Text**

This screen shows a line drawing of a country road with an accompanying white
block containing writing (occupying 10% of the screen). Chapter One has 39
screens; each consists of a block of writing ‘over’ a drawing. The introduction
of drawings to the text brings forth a range of resources for the realisation of the entity
character (including frame, distance, angle, and composition). This includes the
represented elements in the images, framing, point of view (distance and angle),
structure (hyperlinks) and screen composition.

The images of the characters are *narrative representations*; that is, they are repres-
dented as actors in a series of unfolding events. In the screens of Chapter One of the
‘Novel as CD-ROM’ George is primarily represented as engaged in an activity
(walking and looking) with a goal (transactional action). Often these images show
George as the actor and Lennie as the goal of his action. In contrast, Lennie is
represented as engaged in non-transitive actions: he looks out of the screen frame
and has no visible goal, and we are left to imagine what, if anything, he is looking
at in nearly a quarter of screens. The contrast between these visual representations
of the characters represents George as active and Lennie as passive.

The *framing* of an image indicates the discontinuity or continuity between ele-
ments, and in what it is that separates or links the elements. In other words, framing
‘connects’ or ‘disconnects’ elements. The framing of the images in Chapter One of
the ‘Novel as CD-ROM’ is a visual sign of the closeness and status of the
relationship between George and Lennie. Overall George is rarely represented on his
own (2/39). The ‘disconnected nature’ of Lennie’s character is also suggested by
framing. The character is represented as being alone in nearly a quarter of the
screens (9/39). This draws on contemporary visual representations of the lone male
as stalker, rather than the empathetic loneliness of the original novel.

Through the resources of social distance and angle or *point of view* the viewer is
positioned more empathetically to the character George. George is more frequently
shown in close up than Lennie. Overall, Lennie is most frequently shown in
mid-long to long shot. Throughout the chapter close up images of the characters are
used to emphasise visually the intense emotions that are key to the characters and
the relationships between them: Lennie’s lack of control and fear and potential
physical power, George’s frustration and guilt. Through the use of oblique angle and
mid to long distance shots in the still images the viewer is placed at a greater distance
from the character Lennie. The viewer is positioned to observe rather than engage
with his actions and emotions. In some screens point of view is used to represent
Lennie visually as a ‘potential danger’.
In addition to the images of the settings in each screen of the ‘Novel as CD-ROM’, the written text includes hyperlinks to a map of the geographical area that the novel is set in. Locations named in the writing are circled in red, these words link to a map of the area at the time the novel was written. In this way, the narrative is visually located in a visually imagined setting, and in an image of ‘real’ landscape of the past. This locates setting on the border of fact and fiction.

The Compositional Relationship of Image and Writing

The amount of screen space occupied by image and writing on each of the screens varies throughout the chapter. The ratio of image to writing varies the between 5:1 and 3:2. Image dominates the screen-space in the majority of the screens: over half of the screen-space is occupied by image in over three-quarters of the screens.

Writing on the screens is displayed in a white rectangular block, the edges of which are roughly drawn. It has been argued that the visual elements of the screen in CD-ROM versions of books distract students and that visual and written elements should be separated (Graham, 1996). By contrast, I suggest that the spatial relationship between image and writing on each of the screens of the visual version of the ‘Novel as CD-ROM’ is itself a visual meaning-making resource. In other words, writing serves as a visual element, a block of ‘space’, which makes textual meaning beyond its content. The move from page to screen can be understood as a shift from the organisational rules of the page to the organisational rules of the visual-space of the screen. When writing is present in the multimodal environment of new technologies its visual character is foregrounded, and the use of the visual is expanded. Indeed, written elements on screen are now considered by some to be merely what cannot be done in images (Bolter, 1999). New technologies offer the potential to ‘recast modes’ in ways which blur the boundaries between the visual and the written. This shift to the visual is apparent in the ‘Novel as CD-ROM’.

The blocks of writing are positioned on the screen in different places: the left or right side, along the bottom or top length of the screen, or in the top or bottom corner. Depending both on the size and position of the block of writing different parts of the image layered ‘beneath it’ are revealed or concealed. The position of a block of writing (and its movement across screens) emphasises different aspects of the image on the screen. A block of writing may be placed above head of character to indicate who is thinking, or alongside them to indicate talking, or along the bottom of the screen to unite the characters and indicate dialogue visually. At times a block of writing changes the screen image fundamentally (e.g. by concealing either George or Lennie). This interaction between the visual and the written element on screen in the ‘Novel as CD-ROM’ emphasises the actor, and visually marks the intensity of a moment—through persistence on screen. On some screens the image cuts across the lexis and grammar of the written element to create a visual mood (interpersonal meaning) and rhythm (textual meaning). Image and writing appear to ‘belong’ to the two characters differently: Lennie is more frequently represented as expressing himself visually and George more often through writing. The images are not illustrations of the writing, they realise a number of ‘unsaid’ meanings as a visual
summary, including, the volatile and changing nature of the relationship between George and Lennie; the potential sexual threat of Lennie and his disconnected nature; and the designer’s desired audience empathy and identification with George and objectification of Lennie.

The Character Guide

The ‘Novel as CD-ROM’ includes a video character guide named Bindy. This guide appears at 15 different points throughout the novel, including three times in Chapter One. As the reader moves through the ‘Novel as CD-ROM’ the guide automatically appears in the bottom right hand corner of the screen. The guide provides a spoken commentary on different aspects of the novel. This includes the theme of the novel (identified as loneliness), social historical information on the time of the novel, the production of the novel as a play and films, Steinbeck’s life, influences and the inspiration for the novel, and the effect of the novel on Steinbeck’s career.

The visual appearance of the character guide Bindy, particularly his clothes, voice and style of speaking, are similar to the appearance, voice and style in the representation of the character George. Like George he is shown wearing dark jeans, a check brown shirt, and a brown rimmed hat. Visually Bindy’s clothes and physical stature present him as an echo of George. In his third appearance in Chapter One Bindy is shown shuffling a deck of cards, an activity associated with George throughout the book as a symbol of his loneliness and ‘patience’ which is also visually referenced and discussed in his dossier file (discussed later in this chapter). In this way, George’s perspective is foregrounded through his embodiment in the character guide Bindy.

The character guide Bindy’s visual appearance, his open body posture, and rural working class country twang are used to represented him as honest, and perhaps more importantly as ‘authentic’. The guide is placed in the role of storyteller and through a narrative style he presents a range of information. The narrative interludes provided by Bindy offer the reader of the ‘Novel as CD-ROM’ an alternative view of the text. He suggests the need for the reader to move beyond the text, to understand the author, the social context of the novel as well as the need to move through the text to get at its meaning its themes, and how it has been built on by other textual readings. He suggests practices to the reader—to bookmark the text as they read, to make notes, and so on. In this way the character guide Bindy structures and presents the content of the ‘Novel as CD-ROM’ for the reader (Oren et al., 1990). The sequences of the guide also serve to break up the text, to literally stop the reader and ‘make them think’ beyond the text, about what the author is trying to do, or the author’s motivation for setting the story where it is, for example. These sequences ‘model’ the work of analysing a text: the character guide, like the characters in the ‘Novel as CD-ROM’, is meant to make the reader think and act.

Student Interaction With the ‘Novel as CD-ROM’

This section focuses on how some students interacted with these resources, and
describes their ‘reading’ of the ‘Novel as CD-ROM’ as a multimodal text. In the novel the entity character is realised through the written description of movement, gesture, appearance, and speech. The ‘Novel as CD-ROM’ represents character multimodally. A character’s voice is heard, bringing voice into play as a mode and with it a set of semiotic resources for meaning-making—voice quality, rhythm, tenor, pitch, and so on (van Leeuwen, 1999). A range of actional modes are also made available visually via video, including facial expression, posture, gesture, movement, and clothes. These visual and aural resources shape the re-presentation of character. These potentials are selected, and ‘designed’ (configured and arranged on screen) into texts which shape (re-present) the entity ‘character’ in specific ways. Multimodal texts such as these not only ‘powerfully enrich the resources of a book’ (Goodwyn, 2000), they provide new resources for students to engage with in the their construction of character.

The multimodal realisation of the entity character described above raises a serious question for assessment—if character, in its many meanings, is represented in this way, can educators assess all these meanings in one mode? I want to suggest that the current focus of assessment on speech and writing ignores the contribution of a range of modes in the construction of core curriculum entities and constrains the notion of learning and literacy to traditions established on the semiotic resources of more traditional print-based texts.

The focus of assessment on learning as a purely linguistic process also fails to acknowledge the work of students in ‘reading’ multimodal texts such as the CD-ROM discussed in this paper. It has been suggested that CD-ROMs enable learners to determine their own route through materials (Andrews, 2000), and that reading from screen offers a less alienating experience of a text (O’Donoghue, 2000). This multimodal analysis shows that interaction with the ‘Novel as CD-ROM’ in this instance extends the notion of reading and literacy.

The ‘Novel as CD-ROM’ ‘Read’ as Video

Here I give an account of two students’ engagement with the ‘Novel as CD-ROM’. Student 1 and Student 2 ‘open’ it, and quickly close the first video clip (as the first video clip opens automatically when the ‘Novel as CD-ROM’ is selected they have seen the scene many times). Student 2 has memorised the rough location of the video clips via the ‘page numbers’ displayed in the top right corner of the screen. He and Student 1 use this information to find the first two video clips that they watch. Student 2 types in the page number on the computer keyboard and instructs Student 1 to move backwards or forwards using the icons on screen until the video clip is found and opened. He has memorised the elements in sequence (what goes before and what comes after) to locate the video clips: he has internalised the structure of the visual narrative. Having located the video clips the two students sit back, hands off the mouse and keyboard and watch the video. Later they realise that the video clips are always at the start of a chapter and they switch to using the Chapter Menu Bar to find them.
The use of the Chapter Menu Bar as a navigational tool enabled the two students to move almost seamlessly through the ‘Novel as CD-ROM’ as a series of video clips. The students by-pass the novel as a written text (i.e. they do not engage with it) and instead engage with it as a (multimodal) video. The students’ reading transforms the novel to the genre of film, which raises some interesting questions for literacy practices in the English classroom.

The ‘Novel as CD-ROM’ ‘Read’ as Comic

Two students, Student 3 and Student 4, first watch the video clip described earlier. As the video clip closes the screen of the first page in the ‘Novel as CD-ROM’ automatically opens. Student 4 instructs Student 3 to ‘keep going along’, and Student 3 clicks the forward icon with the mouse. As the character guide Bindy appears she clicks to move on, but cannot. The two students watch the screen Student 3 holds the mouse. As Bindy closes, Student 3 clicks the forward icon every two or three seconds and moves through the next 12 screens in this way. Both students lean forward to the screen and look directly and intently at it. The next clip of Bindy opens, the students watch him, and then Student 3 clicks the forward icon to move through the next nine screens of the ‘Novel as CD-ROM’. As the next Bindy clip opens, Student 3 appears to try and close it, and failing that, to try and leave the ‘Novel as CD-ROM’, Student 4 instructs her to stay in the ‘Novel as CD-ROM’ area and to ‘keep going’. Student 3 clicks on the forward icon every 2 seconds and moves through the next 14 screens. The second video clip, in which the characters Lennie and George meet the boss of the ranch opens. Student 3 takes her hand off the mouse and both students lean back in their seats and watch the video clip.

The students did not flick casually through the screens, talking, or looking elsewhere. Their flicking was accompanied by intent looking, an intense engagement. The students’ movement through the screens in this way is a form of engagement with the novel at the visual level.

The potential for animation is enabled by the origin of the images on screen—the still frames from a film. This enables a coherent text to be produced through the encoded conventions of film. The students’ ‘flicking’ movement through the still images of the chapter ‘animates’ the text like a cartoon. The two students then watch the film clips. The students ‘watching’ the novel as a visual text offers them different potentials to make meaning with. As discussed earlier in this paper, the elements on screen, their compositional relationships, the use of representational angle, distance, and frame, etc. on screen to provide a visual summary of the chapter. The images display the sequential events of the novel: walking on the road, thirst—having to drink from the river—going into town to an employment agency, walking again, resting, meeting no one, tiredness, nightfall, sitting together around a fire, talking, camping by a river. Engaging with the novel as a visual text offers a visual summary of the themes of the novel: loneliness, hardship (e.g. sleeping outside, walking most of the day, no food, only river water to drink), and friendship. The key features of the characters are realised visually, the images display the
changing relations between the characters and emphasise particular emotions, and realise viewer relationships to the characters.

In this way the students’ form of interaction with the text served to reshape the entity character by shifting the ‘high’ literacy aesthetic of ‘Novel’ to the popular textual genre of comic and film.

The Multimodal Reshaping of Character in the Dossier Section of the CD-ROM

The Dossier part of the CD-ROM provides a ‘file’ on each of the characters of the novel and it draws on a range of modes including typography, colour, still image, voice quality, and visual and audio hyperlinks.

The opening dossier menu provides a list of names displayed as a ‘work roster’. Typography and colour are used to classify the characters into two groups—‘workers’ and ‘outsiders’. The characters’ names written in a font similar to that of an old typewriter, circled in red and in the genre of a list are ‘workers’. The characters ‘the boss’ and ‘Curly’s wife’ are ‘hand-written’ in red ink. Through the contrast of font-style, colour, and spatial layout, the boss, and Curly’s wife are presented as outsiders.

The written descriptions of characters in each dossier file are presented in a ‘hand-written’ font in the form of a reference from an employment agency. Written texts in the dossiers beyond the first level of display are presented in a plain font with scroll bars. In the former case the ‘hand-writing’ font is used to mark visually the presence of a human writer—the content of what is written is visually expressed as a personal and potentially ‘fictional’ account. In the latter case, the plain font and scroll bars serve to position the content of the writing as a formal and factual account. The contrast in the use of framing and typography between these two screens indicates the different kinds of work the student is being asked to engage with. In the first case, the work of imaginative engagement, and in the second, the work of engagement with the historical ‘fact’.

Each dossier contains a close-up image—photograph, of the actor(s) who played each character in a film version of the novel. This places all of the characters within a shared contemporary time frame and genre. In some dossiers two or more photographs are displayed. This visually highlights the relationship between the characters and the actors who have played them, and asserts the potential for a character to be re-presented in different ways.

The visual objects that are included in each of the dossier files contribute to the construction of the characters and serve to emphasise key themes, and connections. In the dossier file of the character George, for example, the images of envelopes addressed to ‘George’ mean that the character is literate, and that he is in contact with, and cared for by someone. The jack of clubs playing card visually references the character playing patience throughout the novel as a symbolic device to indicate loneliness. The character, Crooks, is visually repositioned via the images in the Dossier. The character Crooks is shown as cleanly dressed, standing in a tidy room,
looking out at the viewer with an intense gaze, his possessions neatly organised, including a collection of books and a light—visual symbols of intelligence.

The characters are also represented via the mode of voice by the narrator’s reading of the written description of the character in the files. The voice of the narrator is male, deep and even toned. The fullness and deep tone of the narrator’s voice is intensified, and the pace significantly slowed, when the narrator reads the description of Crooks. His voice is deep, full, and ‘church-like’. Through the use of image and voice, the character Crooks is removed from the racist animalistic textual context of ‘nigger’ and ‘stable-buck’ of the original novel.

The dossier files of the characters George, Lennie, and Curly’s wife also include audio clips. The characters George and Curly’s wife sing about their feelings. The words of the two songs, the character’s voice quality, rhythm, tone, pitch, and pitch range and music focus on the emotions and private thoughts of the character, and tell of their dreams and hopes. Across the two dossier files the deep mournful tone of both their voices, the words they sing, and the style of the music is suggestive of a duet between George and Curly’s wife.

The range of modes, the number of links to other screens, and the number of visual objects (photograph, visual objects, written text) in each character dossier file varies. These factors, mode, link, and visual objects are a visual indicator of the importance of a character. The widest range of modes (voice, image, and writing) are used to display the information in the dossiers of the characters Curly’s wife, Lennie, and George—these include more than twice as many visual objects on screen as the other character dossiers. Through these multimodal resources the three characters, George, Curly’s Wife, and Lennie, are represented as equally important.

The visual sharing of objects and links across character files enables students to pursue textual and thematic issues (Goodwyn, 2000). In this CD-ROM shared objects appear to be a visual indication of a relationship between characters. Meaning is constructed from the juxtaposition of different texts, and events which unfold ‘through reading across and among various media’ (Zancanella et al., 2000, p. 99). Four of the character files contain shared visual objects: Curly, and Curly’s wife; George and Lennie; George and Curly’s wife. The characters George and Curly’s wife, for example, share the image of an envelope. Through the use of a shared image of a hand-addressed envelope in the files of the characters George and Curly’s wife the Dossier visually introduces the suggestion of a romantic (secretive) relationship between them. This introduces a heterosexual romantic strand into the narrative that serves to realise the vulnerable femininity of Curly’s Wife and the heterosexuality of the character George.

The modal transformation from page to screen does not demand these shifts in the centrality or re-presentation of characters; rather it makes it possible to reshape the characters and their relations, at the same time as maintaining the original novel as a text. The reshaping of the novel occurs in the designer’s use of visual and aural modes, while the mode of writing is used to maintain (reproduce) the text of the original novel. The multimodal reshaping of the characters Curly’s wife and Crooks repositions the novel for a contemporary audience. The potential to read the novel
as sexist and racist (a view expressed by some of the students on reading the novel) is visually ‘overlaid’.

**Students’ Multimodal ‘Readings’ of the Dossier**

The students’ ‘reading’ of the novel and the CD-ROM are in the context of the English classroom infused with the histories of English as a school subject and the demands of the National Curriculum. After using the CD-ROM the students chose a broader range of characters for their course-work including, the Boss, Crooks, Slim, Curly, Curly’s wife, George and Lennie.

When exploring the CD-ROM Dossier, one student, Student 5, repeatedly selected and viewed the file of Crooks. He spontaneously commented on Crook’s character file as his ‘favourite bit’ several times. Student 5 changed his choice of character for the course-work from Lennie to Crooks. When asked why by the teacher he said it was because he was the only Black character and that the CD-ROM had given him more information about the character. While on the one hand it can be problematic to separate character from narrative, on the other hand it can provide a new opportunity for students to engage with the novel and with the characters. The multimodal re-shaping of this character provided Student 5, a young Black man, with a new potential to identify with the character. That is, the resources of the Dossier served to provide a visual multimodal filter with which to engage with the characters within the context of the novel.

Several students’ interaction with the Dossier section of the CD-ROM was mediated by the combination of image, music and song. These students selected the character files with visual links to songs. Just as Student 2 and Student 1 ‘watched’ the ‘novel as film’, and Student 4 and Student 3 ‘read’ the ‘novel as comic’, these students engaged with the ‘novel as musical’. During one 50-minute lesson, for example, two students returned to Curly’s Wife’s song on three occasions, learnt some of the words, and quietly sang along to the chorus.

Student 4, and another student, Student 6, decided after using the CD-ROM to focus on the character Curly’s wife in their course-work. The song sung by the character was given by them as the reason for this change. The song literally ‘gave voice to’ the character Curly’s Wife. The character’s singing presented them with an insight into her emotional life via her voice. In the process the character was transformed from a hardened vamp into a victim of a sexist society. Through her voice, the music, and the words of the song the character Curly’s Wife in the ‘Novel as CD-ROM’ was drawn into the inclusive theme of loneliness.

**Multimodality, Literacy and Assessment**

The preceding sections have shown how the shift from the resources of the page to those of the screen present what is to be learned in a new way and how this raises important questions for what is to be assessed. A new theory of what is to be learned requires a new understanding of how learning happens and how it can most effectively be assessed.
Multimodality

The multimodal resources of the CD-ROM demanded that students engage with the entity character at the level of mode (visual appearance, action, and voice) and at the level of narrative. The multimodal transformation of the characters via the resources of the CD-ROM also repositioned the novel to account for the imagined concerns of a contemporary audience in an educational context. What is to be learnt is reshaped. The resources of page and screen offered students and teacher different possibilities for engaging with specific characters and the construction of character as an entity, and brought forth quite different practices of interaction.

The structure of the CD-ROM provides a modal commentary on the work of studying character within a set text: the expectation that character be understood in its social-historical context, and the need (literally) to move beyond the immediate text. That is, the structure of the CD-ROM provides a reflexive tool for the study of character as an entity. The organisational structure of the CD-ROM Dossier and the ‘Novel as CD-ROM’ (in particular the character guide Bindy) visually model the need to move beyond studying character at the level of the novel as fiction, placing character (and the novel itself) in a historical context.

In the Dossier the screens which automatically open when a file is selected include a spoken and written description of the character, a photograph of the actor who played them in the 1992 film version of the novel, and in some files a collection of visual objects and hyperlinks. This ‘default’ screen is a multimodal engagement with the entity character within the ‘fictional domain’ of the novel. Selecting a visual object link on the screen leads to a domain of ‘linguistic’ commentary on character as an entity. These linked texts are intertextual references, either in the form of factual texts (such as letters from Steinbeck about a character, the actor who played a character, or an academic writing about the character) or spoken, sung, or written references to the construction of character within productions of the novel. This level can be seen as a ‘factual domain’ beyond the fictional novel. That is, fiction is constructed via the visual, while fact is constructed via ‘language’ written, spoken, or sung. In the case of the ‘Novel as CD-ROM’ visual hyperlinks (and the multimodal character guide ‘Bindy’) enabled students to move between the entity character in the novel as a text in the ‘fictional domain’, and the social-historical construction of character in the ‘factual domain’.

This structure indicates that two different kinds of engagement with the entity character and the ‘Novel as CD-ROM’ more generally are required of the student. The first, at the level of display, demands the students’ imaginative engagement with character. The second, at the level of language (written, sung or spoken), demands engagement with the social-historical context of the novel and its subsequent ‘life’ as a text. The ideological expectation in school English that students should move beyond a text when they engage with it, is embedded in the multimodal orchestration of the CD-ROM, in particular, the relationship between visual, aural and written elements.

The work of the students was to interpret this multimodal representation of character. ‘Reading’ or perhaps more aptly ‘watching’ the ‘Novel as CD-ROM’
introduced new resources and practices for constructing and understanding the entity character. The multimodal organisation of the ‘Novel as CD-ROM’ offered students a range of modes with which to engage with it including, video, image, or image and writing. This enabled the students to engage with character and narrative at different levels of reading. The video clips provide a multimodal construction of character and the realisation of the themes friendship and loneliness. These are atomised from the context of the novel and centred on affect and emotion. The screen images throughout the ‘Novel as CD-ROM’ enabled a deeper exploration of character in the context of the sequential unfolding of the events, changing relationships, and locations. Finally, the written text realises character through the narrative descriptions of the novel. In the ‘Novel as CD-ROM’ choice of mode is a choice of the level (detail) of engagement with the entity character.

These multimodal resources enabled students to ‘navigate’ the entity character modally in different ways via song, image, written description, or via the video clips. Several students for example engaged with the entity character entirely via song. This temporarily transformed the ‘Novel as CD-ROM’ into a musical performance/sound track. Several students ‘watched’ the ‘Novel as CD-ROM’ in the form of a film. Others ‘read and animated’ the images via their movement through the text momentarily overlaying the ‘Novel as CD-ROM’ with the genre of comic. In short, the resources of screen enabled the students to bring different forms of engagement to their interaction.

**Literacy**

The student’s interaction with the multimodal resources of the CD-ROM highlight the need to move away from an ‘autonomous’ model of literacy and to conceptualise literacy within broader social orders—to attend to the social character of literacy (Street, 1998). There is a need for a means of talking about this ‘new literacy’ about what we do when we read and produce images (Kress & van Leeuwen, 1996). Computer applications such as the CD-ROM make available a whole range of multimodal possibilities to individuals’ ‘reading’ and production of texts. The multimodal character of information and Communication Technologies allow new kinds of ‘reading’ of texts (Burn & Reed, 1999). The learning processes when working with computers require a substantially different concept of literacy which relates to the different character of texts that students need to work with (Downes & Zammit, 2000). To continue to think of learning only in terms of writing and speech is problematic and serves to highlight what Underwood (1999) has called the ‘cultural chasm’ between the ‘world of words’ occupied by teachers and other adults and the ‘visual world’ of children.

As images are a central part of the communicative environment it has become increasingly important to be able to ‘read’ images. In ‘... a media-text, and symbol saturated environment’, it is important to be able to ‘construct, control, and manipulate visual texts and symbols’ (Luke, 1996). The ability of flexible, interactive fluid hypertext to redefine reader, author, text relation as they construct text in reading it, demands new forms of literacy, new skills of linking, decomposing,
reorganising elements (Bolter, 1999; Lemke, 1997; Beavis, 1998). Computer technologies bring-forth different cultural forms (e.g. computer game, cyber-linked web-site) and have changed some existing cultural forms (such as sampling—non-linear editing). All of these demand an expansion of traditional notions of literacy. This includes the ability to ‘work across text, image, sound and moving image with equal fluency, exploiting each dimension separately and making connections between these historically discrete domains’ (Sefton-Green & Reiss, 1999, p. 2). While many of these skills already exist in the realms of work and education what is new is the speed and ease at which these tasks can be conducted, and the technological environment in which they are facilitated (Lemke, 1997).

Assessment

The teacher’s task in assessment is one of relating the students’ work to the criteria she or he wants the students to know as informed by the curriculum. Assessment is currently conducted in writing and sometimes speech, so that it is restricted to linguistic modes. The specific character of the task is changed when the teacher acknowledges the full range of modes that contribute to the construction of what is to be learnt. First, when a teacher acknowledges the range of modes that shape a curriculum entity they also have to acknowledge that in the process this multimodal representation transforms the entity itself. In the case of the curriculum entity character and novel, discussed in this paper, the ‘Novel as CD-ROM’ transforms these entities into something different, and reconfigures them as they are presented to the students. The literary notion of character (as realising a particular moral, aesthetic, ethical, and dramaturgical function within the novel) is transformed and re-presented as a ‘person’, authorial intent, and sociocultural entity. The teacher needs to be attentive to how such multimodal representations change the entities that are to be examined. She or he needs to be aware that everything they present, whatever the mode, is likely to be read as a part of character. To examine these newly configured entities within the same modal and generic framework of linguistic assessment is to ignore the transformation of the meaning of the entity.

Taking students’ engagement with a text as one kind of evidence of learning, a trace of their thinking, shows that these new multimodal entities provide new and different resources for their interaction and learning. The evidence of their engagement is presented by them in a number of modes and is generically unusual—not a written essay or multiple choice. If a teacher focuses on one mode, written mode as is traditionally the case in assessment, these traces of learning will not be apparent. My work with others (Kress et al., 2001) in the science classroom shows that diagrams, drawings, and three dimensional models are all brought into the learning of science, and at the same time as far as the teacher is concerned, these stand apart form the process of assessment. This is problematic because as this paper and other work show, students represent knowledge and learning in a range of modes. A student may represent some aspects of ‘what is to be learnt’, in this case the entity character, in written mode, and represent other aspects of the entity in an image, or through their embodiment of the character in performance. The point to make here
is that the student is working with a multimodal concept of character. Everything that is presented to the student, via the CD-ROM, the teacher's talk, gesture, and images, etc., and the novel, is potentially significant for the student, and these aspects of significance are realised in the signs that they produce. Signs that the students make may have different aspects of character in mind, and these will require different modal realisations.

Moving away from language to a multimodal assessment involves the teacher in engaging with the students’ work with multimodal resources/discourses in the classroom to make sense of the text (as novel) and character. In order to assess students’ learning in the lessons described in this paper, the teacher could for instance, focus on the way students move through the ‘Novel as CD-ROM’, assess their sense of the entity character in the ‘Novel as CD-ROM’. The students’ ‘reading’ of the ‘Novel as CD-ROM’ may reveal quite different ways of understanding character, for instance as historical person, personality, authorial intent and so on. For instance, the students who return repeatedly to the musical clips included in the CD-ROM focus on the realisation of character through a discourse of emotion and romance, while the aspect of character suggested by the students’ watching of the novel as ‘film’ is one of imaginative engagement with a historical person. The transformation of the entities ‘novel’ and ‘character’ enabled several students working with the ‘Novel as CD-ROM’ to identify with the minor characters in the novel. In this sense the way in which students move through the text is a trace of their engagement with the entity ‘character’ and one that a teacher attentive to a range of modes may need to bring into the practices of assessment. Such engagement also informs (stands behind) how students construct character in their writing, including their choice of characters to focus on in the assignment to write about the day in the life of a character.

The question of what is to be assessed is also connected with the genres of assessment, the essay, course-work, examination, which are intimately connected with the mode. Currently, with the exception of speaking and listening, the mode of assessment is writing. There is, however, performance of character, the visual production of character, and the multimodal representation of character, all of which offer the teacher different ways of getting a sense of the students’ production of character as an entity.

The above discussion of assessment focuses on external signs of learning but also relates to ‘internal signs’. Internalisation (Vygotsky, 1978) is, I argue, a multimodal process in which the multimodal semiotic resources of the social plane are reproduced by the learner and become the tools for individual thinking. In other words, the events enacted on the social plane (the words, images, gestures, and other modes of the teacher, and the characters represented on the CD-ROM) are processed, ‘taken in’ and internalised by the students. The multimodal character of the CD-ROM of the Steinbeck novel Of Mice and Men (1937) offers students more than the spoken or written canonical signs of school English. While the activity of the social plane of the classroom is richly multimodal it is true to say that what ultimately counts in the assessment of school English is to be able to commit the ‘expected’ school English account to paper in written mode. The stark contrast
between the multimodal practices of students with such computer applications in the school classroom—the meaning-making or ‘work’ that they are engaged with—and the linguistic ‘mono-modal’ focus of educational assessment is shown here. This paper demonstrates the need to broaden assessment, both from the teacher’s position of what to include in assessment and the student’s position of selecting resources for meaning-making beyond language (speech and writing), in order to begin to ask how multimodal learning might be more effectively assessed.

Conclusion

Engaging with the book *Of Mice and Men* required the students and teacher to build on the frame of writing. They read to imagine the characters, their motivations, emotions, appearance, voice, and so on. The students’ identification with the characters and the moral dilemmas they encountered is foregrounded in this reading. The multimodal transformation of the novel *Of Mice and Men* to CD-ROM offers a specific reading of the novel. It reshapes the characters, their relations and motivations, and the narrative. It ‘fills in’ the descriptions of the characters: it ‘does’ much of the imaginative work demanded of the students as they read the book. The electronic reorganisation of original text into the CD-ROM is atomised, the narrative is disrupted, and the issues of morality brought about by the careful written webs of connections are ruptured and diffused.

The CD-ROM provides the students with different tools to think with in their engagement with the entity character, which reflect the demands of the curriculum. The CD-ROM reading of character is not a question of morality and identification, the reader will not ‘come to know themselves’, the reader will come to know the text for examination. The task for students is to understand character through their writing not through their lived morality. Character is not a matter of personal growth, but an analytic textual device. The merging of voices in the Dossier of the CD-ROM offers an explicit notion of character as an entity produced by many people over time rather than the stable authoritative voice of the author. Character is presented not as a stable moral emblem but a fluid entity that demands to be read in a social-historical context beyond the text. This suggests that the entity character is not the product of an individual reading but the outcome of a collective social reading.

The multimodal reshaping of the construction of curriculum entities and the practices of reading brought forth by the multimodal context of learning, in particular computer mediated learning, have important consequences for literacy and assessment. There is a need to move beyond language in order to understand the complexity of learning and literacy in the multimodal environment of the classroom. Further, in order to assess what it is that is learnt assessment needs to re-focus in order to attend to the full range of modes involved in learning.

Amongst all the uncertainty of what it is to engage in a meaningful way with new media in school English it is clear that the expansion from novel to screen has implications for a traditional notion of literacy and assessment. The students’ engagement with the CD-ROM described in this paper suggests that the forms and
practices of reading such multimodal texts remain relatively open for the time being. ‘Reading’ or perhaps more aptly ‘watching’ the ‘Novel as CD-ROM’ introduced new resources and practices for navigating, constructing and understanding the entity character. In this multimodal environment it is clear that to persist in thinking of literacy, learning and assessment primarily in terms of language (writing and speech) is problematic.

NOTE

[1] In everyday interaction the culturally established norms of social relations determine the distance we keep from one another to suggest different degrees of intimacy or formality.

REFERENCES


