Colloquium

Living learning theory through My Fair Lady

Holly Glenzer

An inter-disciplinarian, Holly Glenzer, holds a Masters of Instructional Technology at the East Carolina University in Greenville, North Carolina, USA. Her major research interest lies in integrating intercultural communication with instructional learning theory and practice. Address for correspondence: 889 Best Road #3E, West Sand Lake, New York, USA 12196. Email: holdon94@juno.com

Abstract

In My Fair Lady (Lerner & Lowe, 1956), the play, the renowned linguistics professor, Henry Higgins, attempts to instruct the common flower-vendor, Eliza Doolittle, in proper English etiquette and speech. Revisit the colourful story from the perspective of a twenty-first century instructional designer. Set in the 1910s, but written in the heyday of behaviourism, the play reflects the idea that behavioural change is the evidence of learning. As we analyse Professor Higgins's applied theory of learning and instruction, we find unique examples of behaviourism, cognitivism and constructivism at work in the instructional strategies and activities and in the good professor's interpretations of Ms Doolittle's actions and attitudes toward learning.

The professor's learning objective for Eliza can be defined generally, as getting Eliza to speak and act in the proper manner with a criterion of using a London (as opposed to a Cockney) accent and to behave as a lady (as opposed to a street vendor).

Practice makes perfect serves as the day and night behavioural drill that Eliza must follow. Repeating her vowels until she loses that dreaded accent consumes the professor. 'Listen to me speak and watch my mouth,' he often says to her. He even places marbles in her mouth and requires her to then recite from a book as Demosthenes once practised. Through these instructional strategies, the importance of observable behaviour in stimulus and response actions shows Higgins using verbal reinforcement. Further, he uses chocolates and strawberry biscuits to condition improved performance from Eliza, associating learning with particular stimuli and correct responses with emphases on incentives and habits.

Higgins engages in a neo-behaviourist approach. In demonstrating the proper way to hold a teacup and saucer, he promotes the law of contiguity in movement (Guthrie cited

When Eliza finally pronounces the rhyme correctly, *the rain in Spain stays mainly in the plain*, Higgins asks her to recite it again, and again, and again. Unlike Skinner, he does not apply intermittent reinforcement (he is rather incessant). Once Eliza can speak the phrase in the proper way, it becomes a reinforcing stimulus as a behavioural outcome. The discriminative stimulus for Eliza lies in pleasing Higgins, fuelling the appropriate response and reinforcing the cycle.

Because Professor Higgins lives and breathes as a professional linguist, he naturally relies on using phonetics to instruct. In agreement with operant conditioning, Higgins performs the following: (a) identifies the learner’s entry skills, (b) specifies the behaviour to be learned, and (c) programmes the instruction in small steps.

To implement these events, first he writes detailed notes on Eliza’s speech patterns (identification of entry skills) while observing her on the street selling flowers. Later at his home, he records and analyses her speaking on a phonograph. Next, he specifies the behaviour to be learned by modelling vowels, consonants, words and then sentences for her. Through this, he programmes in small steps.

Now, we turn to how a cognitivist would interpret these scenes. How would Bandura have instructed Eliza? According to Bandura, consequence motivates behaviour based on the functional value to the learner. The consequence for Eliza would be attending the aristocratic ball for the Queen of Transylvania as a bona fide lady. For the functional value, Ms Doolittle would no longer be just a common flower vendor.

Choosing to be instructed by Professor Higgins and to work towards the objective of speaking and behaving as a proper lady, Eliza reveals gumption or in Bandura’s terminology, a sense of self-efficacy. Her continued practise despite difficulties leads to reciprocal determinism. Behaviour, environment, and internal events create an iterative flow. Though Higgins operates as a major part in the environmental factors, Eliza proceeds towards a self-regulatory process by self-observation, self-judgement, and self-reaction (Gredler, 2001, pp. 317, 333). When she mispronounces, she reattempts. When she attends the horse races and talks indiscreetly, she determines her performance errors through self-reflection. In believing she could manage lady-like behaviour at the horse races, once again she shows self-efficacy. Eliza is becoming Ms Doolittle.

To become a lady, Eliza must obtain tacit knowledge. Such knowledge organises a schema into particular realities. Neath defines a schema as an ‘...organized structure that reflects an individual’s knowledge, experience, and expectations about some aspect of the world’ (cited in Gredler, 2001, p. 179). From this definition, schemas spring from socio-cultural contexts. Professor Higgins knows the schemas that Eliza must learn and hence takes her to the horse races to observe and model the ladies there. Living and
learning at the professor’s home could not provide the real-world schema as an authen-
tic context to experience. Indeed, his home acts as a classroom for rehearsal.

The racing function strengthens Eliza’s schematic learning as an episodic form of mem-
ory, whereas the ‘home-schooling’ with Higgins mostly utilises semantic and proced-
dural memory (Tulving cited in Gredler, 2001, p. 171). Tulving would ensure that
encoding takes place for Eliza by using retrieval cues and would concur with Higgins’s
rhyme method, the rain in Spain stays mainly in the plain.

Continuing the theme of schemas and memory, Piaget (a contemporary to the play)
wrote of equilibration regulating assimilation and accommodation. To explain, he
defined assimilation as ‘the incorporation of an external element... into a sensorimotor
or conceptual scheme’ (cited in Gredler, 2001, p. 247). Accommodation he defined as
‘the adjustment of internal structures to the particular characteristics of specific situa-

Piaget would say that Eliza’s actions stem from a motivation based on her need to
resolve the disequilibrium between her way of speaking (Cockney) and behaving (com-
moner) compared with the ladies and gentlemen she encountered. In order for her to
accommodate, she must reorganise her prior thinking through reflective abstraction.
That is she must consistently recognise when she reverts to Cockney or behaves unlady-
like and then change the pattern.

Turning next to Gagné’s theory of learning, we examine: (a) categories of learning, (b)
respective outcomes and capabilities of the categories, and (c) internal and external
conditions of learning.

First of all, the category of learning in the objective to act and speak like a lady,
involves a complex of learning categories. Verbal information in declarative knowl-
edge must be learned such as the alphabet, sentence syntax and grammar. Language
requires learning intellectual skills, as does the language of etiquette and manners. In
addition, attitudes influence how Eliza perceives the learning process and participates
in it.

Secondly, the internal conditions of learning consist of Eliza’s prerequisite skills and
attitudes known as inner states, and also cognitive processes. The essential prerequisite
skills comprise changing the accent and wording, speaking in turn, dressing well, and
more, for what constitutes being a lady. Higgins starts out as essential to Eliza but
moves to a supportive role in facilitating learning the hierarchy of skills for the objec-
tive. Gagné would specify the cognitive processes as transfer of learning, metacognitive
strategies and problem-solving. At the horse races, Eliza attempts to be a lady by relying
on her memory of weather and health conversation pieces. Her failure in saying too
much, too loosely, for the Victorian values of the time, serves as a catalyst for self-
reflection. Would Gagné not praise Higgins’s effort towards transfer of learning at the
horse races?

© British Educational Communications and Technology Agency, 2005.
Thirdly, the external conditions of learning build from nine instructional events (Gagné, cited in Gredler, 2001, p. 149). Professor Higgins certainly gains Eliza's attention and informs her of the relevance of the objective. The 'carrot stick' of going to the ball, he dangles ever before her. Likewise, this stimulates recall of prior learning in making Eliza think about the grand people she had seen, dressed up, attending formal occasions.

Using phonics to present distinct stimulus features, Professor Higgins continually articulates aural tones and sounds for Eliza. Both in and outside his home, he encourages performance of the objective and gives immediate, albeit at times harsh, verbal feedback. Constantly, he assesses Eliza's performance by listening and recording her talk and by watching her closely. Retention comes through verbal rhymes and dress rehearsal practice.

Let us now consider the constructivism of Vgotsky with a brief review of his cultural-historical context for learning and development. For Vgotsky, 'characteristics of higher mental functions and the zone of proximal development' can determine complex thought (Gredler, 2001, pp. 293–295). Higher mental functions classify into four types, which contain categorical perception, logical memory, abstract thought and voluntary attention; these functions form a new organisation or construction of knowledge. Though development of higher mental functions (cognition) can be actual or potential, the zone of proximal development alludes to the potential development—the abilities or capabilities that a learner has yet to develop.

Professor Higgins worked with Eliza on the higher mental functions of language development. Through signification in reading, writing and rehearsing, Eliza learns to reorganise prior knowledge and to construct new knowledge as well. Though not a child, Eliza did play 'being a lady,' an example of abstract planning in imitating and practising with Higgins. Interaction with Higgins and his colleague Colonel Pickering provided auxiliary stimuli.

Relating to Vgotsky's general law of genetic development, the process of language development or in this case, refinement of prior language knowledge, occurs as the learner links the object stimulus to the mean stimulus through an auxiliary stimulus. Eliza became a lady as her self-awareness and mastery led to higher cognitive functions. That is what Vgotsky would argue.

Moving to how a contemporary constructivist viewpoint defines knowledge development, Phillips writes about society creating the rules and criteria to construct knowledge (Phillips, 1995, p. 9). This can be seen throughout My Fair Lady. What modern constructivists would emphasise in the play would be the instructional strategy Higgins uses in teaching Eliza, to do what a lady does, to act like a lady, to be a lady. He applies a major constructivist tenet—situated cognition and apprenticeship. Bednar et al could applaud this. 'Learning always takes place in a context and the context forms an inexorable link with the knowledge embedded within it.' 'The constructivist teacher must
model the process for students and coach the students toward expert performance’ (Bednar, Cunningham, Duffy & Perry cited in Anglin, 1991, p. 27).

In closing, Professor Higgins gave Ms Doolittle a framework to practise becoming a lady through her self. Winograd and Flores (cited in Duffy and Jonassen, 1992, p. 5) describe this as ‘...providing the student with the means of experiencing the history of interactions—building the “unformalized” background that can be used to create representations in the future.’ Only Ms Doolittle could do this by transferring her learning to real life. Professor Higgins learns to love her, not because she can now speak properly, but because she has grown into her own selfhood. She sings, ‘I Can Do Without You,’ and Higgins knows she can.

References