

# Teaching business English to adult Malay learners: The potential of agent technology



**Harmi Izzuan Bin Baharum and Alexei Tretiakov**  
Information Science Research Centre, College of Business  
Massey University

**Kinshuk**  
School of Computing and Information Systems  
Athabasca University

We analyse the needs of adult Malay business English learners, and demonstrate that they can be met by using an on-line teaching environment relying on animated pedagogical agent technology to implement scenario-based learning.

Keywords: business English, Malay learners, agent technology

## Introduction

The most striking characteristic of the Malaysian society is its cultural diversity. Malaysia is a multi-racial, multi-cultural and multi-religious society consisting of 60.7% Malays, 25.3% Chinese, 7.4% Indians and 6.6% of other ethnic minorities (Government of Malaysia, 2001). Over the last two decades, Malaysia has undergone a tremendous growth in its economy, seeing a change from being a producer of raw materials to becoming a major multi-sector economic player. It is currently one of the fastest developing countries in Southeast Asia.

Formerly a British colony, Malaysia gained its independence from the British rule in 1957. After the British colonisation ended, Malay was made the national language and was used as the language of administration and as the medium of instruction in schools and universities. English becomes an officially recognized important second language and is taught as a compulsory subject in schools (Kim, 2003). Both languages, Malay and English are used for communication between representatives of different ethnic groups. As local dialects continue to play an important role, many of the Malaysians are effectively trilingual (Fung, 2006), although their mastery of standard Malay and English varies a lot.

## Malays as English language learners

Despite the official status and the ubiquity of English in Malaysia, the quality of the English language spoken by Malays is often relatively poor, and often poorer than among the Malaysian Chinese and Indians. The low English proficiency among the Malays can be attributed to the following factors.

Firstly, Malays are better represented in rural areas than Chinese and Indians. Rosli and Malachi (1990) point out that a dualism of status exists between rural and urban areas in Malaysia. While English is taught as a second language in urban areas in well-equipped classrooms, the scenario is different for rural areas where there is a shortage of qualified teachers and instructional materials (Nunan, 2003). Also, in rural areas English language media are not as readily available as in the cities, resulting in lack of exposure.

Secondly, after the independence, a new variety of English known as the Malaysian English or “Manglish” has emerged among the Malays (Preshous, 2001). Although the English language taught at school and tertiary levels is intended to mirror the Standard British English, outside of the classroom the Standard English is spoken primarily by the elite. It is common for other Malays to speak in broken Malaysian English and/or to mix English language with Malay.

Another factor is that although English has an important role in the Malaysian context (English is heavily used in the private sector), Malay is the predominant language in civil service sector (government administration) where many of the Malays are working in. Malays find themselves at ease in working environment where they can utilise the Malay language and can still be understood by other Malaysian ethnics (Ting, 2003). Besides that, the Malays’ attitude towards learning the English language is

sometimes clouded by their resentment towards colonisation in the past. Hostility towards the language is due to the perceptions that they are “showing off” or are “too westernised” if they speak mostly in English (Ming, 2004).

## **Current practice in teaching business English in Malaysia**

The globalization trend and the advent of e-business and e-commerce have reinforced the status of English as the international language for business communication among Asian countries. Kim’s study (2003) on 15 countries in South East Asia shows that English is the most popular choice of a foreign language.

The importance of business English in Malaysia has taken a centre stage when in 1993 Malaysian political establishment set an aim to make Malaysia a fully “developed” economy by the year 2020. There is a growing realisation in Malaysia that in order to stay competitive in the global market and to attract foreign investments, one of the practices required is to use English which is the language of communication in the domain of international business and industry (Albar, 2000; Kim 2003; Samuel & Bakar, 2006).

Business English communication is taught in Malaysia as part of teaching of English for Specific Purposes (ESP) and as business English (BE). Business English courses are conducted at tertiary level and are taught to learners who are enrolled in Business Studies. Some companies or organisations may also occasionally offer business English training courses to their staff. Considerable proportion of those who take up these courses are adult learners, and many of them are working adult learners. According to Asaari and Kariau (2004), the population of working adults studying at Malaysian higher institutions is increasing rapidly. Most of these people are pursuing their higher education for skills upgrading. Adult learners are known to have different learning traits from younger learners. On one hand, they often take a more responsible attitude to their studies than younger learners; on the other hand they are often busy as they have family and work commitments.

At present, numerous factors can inhibit these learners from attaining high level of proficiency in business English. One of them is due to how business English courses are conducted. Pandian (2002), for instance, states that English Language Teaching (ELT) syllabus in Malaysia is often designed to put excessive emphasis on formal aspects of grammar, while learners are taught at a common pace without taking into account their background or individual needs. Adult learners are often not accustomed to acquiring formal knowledge, and have different levels of exposure to English in their daily and professional lives, requiring an individualized approach, particularly for weaker students.

This problem is further compounded by the choice of teaching and learning materials. Traditionally, the most common type of teaching material used to teach business English are textbooks. The major problem with using textbook format is that it is non-interactive and lacks stimulation. Apart from textbooks, audio-visual materials which only provide one-way interaction, such as video and audio cassettes, may also be used. Teaching materials that lack interactivity in combination with high student to teacher ratios in the classroom often result in learning environment that is not conducive to developing communication skills.

In most cases, these learning materials are imported from overseas, and are targeted at non-native speakers who either work or study in native speaking contexts and almost invariably interact with native speakers (Venugopal, 2006), which is not the case for Malaysian learners, particularly in rural areas. Also, the content of these materials does not take into account the Malaysian cultural setting. Reid (1987) demonstrates that when learners coming from diverse language and cultural backgrounds are taught homogeneously by ESL instructors who have little knowledge of students’ learning styles and are using materials that have been developed without taking their needs into account, it creates a barrier to learning.

## **Scenario-based learning**

There is a growing consensus among language teaching community that, comparing to classical “instructivist” learning emphasising vocabulary and formal grammar rules, better course completion rates and better learning outcomes can be achieved by using approaches that enhance opportunities for students to engage with authentic situations and tasks. Some of such approaches, influenced by constructivist philosophy, are problem-based learning (Felix, 2002) and scenario-based learning (Kindley, 2002).

Scenario-based learning is defined as “... learning that occurs in a context, situation, or social framework. It is based on the concept of situated cognition, which is the idea that knowledge can’t be known or fully

understood independent of its context” (Kindley, 2002). Scenario based instruction is grounded in situated learning theory, which focuses on the importance of contextualizing learning activity in real life scenarios and contexts. In scenario-based learning, learners participate in a fictional context-based meaningful authentic learning environment and collaborate with other participants in completing activities structured into scenarios reproducing real-world situations. Decisions made by the learners affect the outcomes of the scenarios. Continuous feedback is provided for guidance and scaffolding. The benefits of scenario-based learning and its successful uses in language teaching are well documented (Gee, 2004). Scenarios are selected to reflect common and/or particularly important situations that are likely to occur in the actual language use.

Scenarios and case studies are a common way to structure business-related knowledge. Therefore, in our view, scenario based learning is a paradigm particularly suitable for teaching business English. In case of business English, common business scenarios can be used, resulting in authentic, immersive learning environment. In such an environment, linguistic knowledge can be acquired directly as tacit knowledge, without formalising it as grammar rules or vocabulary lists. At the same time, scenario-based learning allows learners to focus on the target context of language usage (in our case – business English communication), resulting in more student interest and involvement in the learning tasks.

### **Implementing scenario-based learning approach by using animated pedagogical agents**

One considerable drawback of scenario-based learning is that it is expensive to realise. A group of learners involved in a scenario has to be small enough to allow the teacher to be aware of their progress and to provide feedback. The traditional approach allows for much higher student to teacher ratios, and therefore, is less expensive to deliver. The problem of delivering scenario-based learning inexpensively can be resolved by using intelligent animated pedagogical agents (APA) technology.

Animated pedagogical agents appear to the learners as a two- or three-dimensional anthropomorphic (i.e., humanlike) characters in a computer-based learning environment. In terms of the underlying technology, they rely on merging artificial intelligence, speech recognition, voice synthesis and virtual reality. Animated pedagogical agents can interact with learners and are designed to facilitate learning in computer-based learning environments (Baylor, 2000; Craig et al., 2002; Johnson et al., 2000). While the idea of using animated pedagogical agents is not new, only recently the underlying technologies matured enough to make the creation of practicable APA-based learning environments feasible.

Animated pedagogical agents can facilitate learning in a number of ways. APA can use both verbal communication and non-verbal cues in interacting with learners. They can guide students’ attention in an interactive learning environment (Moreno, 2004) and provide learners with feedback, modelling, and guidance (Moreno, Mayer, Spires, Lester, 2001) during the learning process. Of course, the level of intelligence exhibited by APA is limited by the capabilities of present-day AI technology, however, for as long as the interactions with learners remain within the bounds of the prescribed set of scenarios, it is sufficient to ensure effective learning. An example of an APA-based learning environment used for scenario based learning in the domain of foreign (Arabic) language training and cultural familiarisation is given by (Sims, 2007), which also discusses the underlying technical issues, and the experiences of using it in practice. While conventional on-line learning environment, involving multimedia content such as text, sound, and video provided via World Wide Web can also be used to facilitate low cost business English teaching, it can not by itself realise scenario-based teaching. Early studies comparing APA language learning environments with conventional web based environments demonstrated the superiority of APA environments in terms of achieving better learning outcomes (Atkinson, 2002; Johnson, Rickel, & Lester, 2000).

A language learning environment realising scenario-based teaching via APA technology conforms to the theories of adult learners’ second language learning acquisition developed by Brown (2000) and Larsen-Freeman & Long (1991):

1. Adult learners prefer to learn language which is meaningful. In scenario-based teaching, learners are applying the target language in scenarios simulating real-life situations. Hence, the context guarantees that the language is meaningful.
2. Adults learn best when they feel safe to make mistakes. The main reason for most adult learners to have fear of making language mistakes is because they feel they are poor language learners either due to age factor or due to previous unsuccessful attempts to learn the target language. Second language classroom environment can easily intimidate adult learners, especially if they had not experienced

successful learning experiences in formal classrooms before. As animated pedagogical agents are not human, but, in a limited way, can act intelligently, they realise an ideal situation when feedback, including encouragement and reassurance, is provided, while, at the same time, the learner, if desired, can study in privacy, with no fear of judgement by the teacher or by classmates. On the other hand, scenarios involving multiple students offer considerable pedagogical advantages (Wang, 2004) and should be provided for students who have sufficiently built up their confidence.

3. Adult learners prefer constructive feedback on each learning task they have accomplished. Scenario-based approach has an advantage here because this approach focuses on successful completion of tasks rather than achievement of grades. Animated pedagogical agents' capabilities to use verbal (e.g. instructional explanations) as well as non-verbal forms of communication (e.g. gaze and gestures) when giving feedback to learning tasks can contribute to enhancing learners' motivation and cognitive engagement in accomplishing the tasks (Andre et al., 1998; Lester et al., 1997; Atkinson, 2002).

## Conclusion

Based on the above consideration of the needs of adult Malay learners of business English and of the capabilities and advantages of APA technology, we conclude that an on-line teaching environment implementing scenario-based learning using animated pedagogical agents is likely to offer an effective and efficient solution.

### Such an environment would involve the following features:

1. An immersive 3d environment forming context for playing out business scenarios;
2. Students, teachers, and animated pedagogical agents are represented by avatars;
3. Animated pedagogical agents are able to react to utterances by students and teachers in ways consistent with the scenarios;
4. Animated pedagogical agents are able to act outside of the scenarios where appropriate by providing guidance, reassurance and advice to the students;
5. It should be possible to execute scenarios involving individual students, as well as student groups, with students interacting with each other as well as with teachers (if present) and with APA;
6. The environment should be accessible over the World Wide Web, so that all students in possession of a PC with Internet connectivity are able to access it.

### It will enable to:

1. Offer to Malay learners exposure to English language environment, including learners residing in rural areas;
2. Offer an interactive environment that (in single student mode) would be considered "safe" by shy Malay learners, weary of the stigma associated with using English, allowing them to build confidence;
3. Cultural fit will be ensured by an appropriate selection of both the overall context and of specific scenarios;
4. Adult learners will be able to access the environment at convenient times to fit their busy lives. They will be able to choose the scenarios and the length of exposure appropriate for their individual level of ability and existing language skill. Yet, unlike in conventional web-based environments, they will be receiving immediate feedback and guidance;
5. The scenario-based approach will minimise the reliance on formal grammar rules, while ensuring that the skills learned are directly relevant to business English communication;
6. As teacher involvement in conducting the scenarios can be minimised, or teachers may not be involved at all, all these benefits can be provided very inexpensively.

Our future research will involve implementing a prototype of such an environment by using existing technology, and empirically demonstrating its effectiveness.

## References

- Albar, S.H. (2000). English language teaching in Malaysia : Learning from lessons from the past. Forging tracks for the future (keynote address). Malaysia International Conference on English Language Teaching. Melaka , Malaysia.
- Andre, E., Rist, T., & Müller, J. (1998). Integrating reactive and scripted behaviors in a life-like presentation agent. In K.P. Sycara, & M. Wooldridge (Eds.), *Proceedings of the Second International Conference on Autonomous Agents* (pp. 261–268). Minneapolis : ACM Press.

- Asaari, M.H.A.H. & Kariau, N. (2004). Case of adult learners and work satisfaction: who's behind them? *Turkish Online Journal of Distance Education TOJDE*. ISSN 1302-6488, 5(4).
- Atkinson, R. K. (2002). Optimizing learning from examples using animated pedagogical agents. *Journal of Educational Psychology*, 94(2), 416-427.
- Baylor, A.L. (2000). Agent-based learning environments for investigating teaching and learning. *Journal of Educational Computing Research*. 26(3), 249-270.
- Brown, H.D. (2000). *Principles of language teaching and learning (4th ed.)*. New York : Addison Wesley Longman.
- Craig, S.D., Gholson, B., & Driscoll, D.M. (2002). Animated pedagogical agents in multimedia educational environments: Effects of agent properties, picture features, and redundancy. *Journal of Educational Psychology*. 94(2), 428-434.
- Felix, U. (2002). The web as a vehicle for constructivist approaches in language teaching. *ReCALL*. 14(1), 2-15.
- Fung, Y.M. (2006). The nature and dynamics of collaborative writing in a Malaysian tertiary ESL setting. Unpublished PhD dissertation. Massey University.
- Gee, J.P. (2004). *Situated language and learning*. New York: Routledge.
- Government of Malaysia (2001). Eighth Malaysia Plan, 2001-2005. Kuala Lumpur : Percetakan Nasional Malaysia Berhad.
- Johnson, W. L., Rickel, J. W., & Lester, J. C. (2000). Animated pedagogical agents: Face-to-face interaction in interactive learning environments. *International Journal of Artificial Intelligence in Education*, 11 , 47-78.
- Kim, L.S. (2003). Multiple Identities in a Multicultural World: A Malaysian Perspective. *Journal of Language, Identity, and Education*, 2(3), 137-158.
- Kindley, R. W. (2002). Scenario-Based E-learning: A Step Beyond Traditional E-Learning. <http://www.learningcircuits.org/2002/may2000/kindley.html>.
- Larsen-Freeman, D., & Long, M.H. (1991). *An introduction to second language acquisition research*. New York : Longman.
- Lester, J. C., Converse, S. A., Stone, B., Khaler, S., & Barlow, T. (1997). Animated pedagogical agents and problem-solving effectiveness; A large-scale empirical evaluation. Proceedings of the 8th World Conference on Artificial Intelligence in Education. Kobe , Japan .
- Ming, T.S. (2004). Learning English in Multicultural Malaysia: Are learners motivated? *Journal of Language and Learning*, 2(2), 142-153.
- Moreno, R. (2004). *Immersive agent-based multimedia environments: Identifying social features for enhanced learning*. In H. M. Niegemann, F. D. Leutner, & R. Brünken (Eds.), *Instructional design for multimedia learning* (pp. 9-18). Münster: Waxmann.
- Moreno, R., Mayer, R. E., Spires , H. A., & Lester, J. C. (2001). The case for social agency in computer-based teaching: Do students learn more deeply when they interact with animated pedagogical agents? *Cognition and Instruction*, 19(2), 177-213.
- Nunan, D. (2003). The Impact of English as a global language on educational policies and practices in the Asia-Pacific Region. *TESOL Quarterly*, 37(4) , 589-613.
- Pandian, A. (2002). English language teaching in Malaysia. *Asia Pacific Journal of Education*. 22(2), 35-52.
- Preshous, A. (2001). Where you going ah?: An account of the origin and development of Malaysian English. *English Today*, 17(1), 46-53.
- Reid, J.M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21(1), 87-111.
- Rosli, T. & Malachi, E. (1990). A comparative study of the achievement and the proficiency levels in English as a second language among learners in selected rural and urban schools in Peninsular Malaysia. *The English Teacher*, 19, 48-57.
- Samuel, R.J., & Bakar, Z.A. (2006). The utilization and integration of ICT tools in promoting English language teaching and learning: Reflections from English option teachers in Kuala Langat District , Malaysia . *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, 2(2), 4-14.
- Sims, E.M. (2007). Reusable, lifelike virtual humans for mentoring and role-playing. *Computers & Education*. 49(1), 38-40.
- Ting, S.H. (2003). Impact of Language Planning on Language Attitudes: A Case Study in Sarawak. *Journal of Multilingual and Multicultural Development*, 24(3), 195-210.
- Venugopal, S.N. (2006). An interactional model of English in Malaysia. *Journal of Asian Pacific Communication*, 16(1), 51-75.
- Wang, Y. (2004). Supporting synchronous distance language learning with desktop video conferencing. *Language Learning & Technology*. 8(3), 90-121.

**Please cite as:** Baharum H.I.B., Alexei Tretiakov, A. & Kinshuk. (2007). Teaching business English to adult Malay learners: The potential of agent technology. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*. <http://www.ascilite.org.au/conferences/singapore07/procs/baharum.pdf>

Copyright © 2007 Harmi Izzuan Bin Baharum Alexei Tretiakov and Kinshuk

The authors assign to ascilite and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ascilite to publish this document on the ascilite web site and in other formats for *Proceedings ascilite Singapore 2007*. Any other use is prohibited without the express permission of the authors.