

Presentation and Evaluation of a Textbook's Speaking Tasks according to Nation's, Johnson's and Beaumont's criteria and the ICTs' Role

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Abstract: The purpose of this paper is to present and evaluate the speaking tasks of a particular unit of a textbook according to certain criteria, assess its influence on the learners' speaking performance and develop an original speaking lesson accompanied by its activities. In the first part, there is a brief description of the teaching situation, with reference to students' profile, the curriculum and the coursebook used. In the second part, the speaking tasks of the coursebook are evaluated according to Nation's, Johnson's and Beaumont's criteria, while its role on learners' speaking performance is mentioned as well. In the last part, there is a presentation and justification of an original speaking lesson plan on Bullying and its activities.

1. Description of the teaching situation

The particular class consists of 16 Greek students (9 male and 7 female ones), aged 12 to 13, attending the first grade of a Greek junior high school. All learners are monolingual and they have been learning English, since they were in the second grade of primary school. The group's competence levels range from intermediate to upper-intermediate (B1-B2) according to the CEFR (2021). Most of them are highly motivated to engage actively in any kind of speaking activity and interact with their classmates by using the English language, while at the same time, they show a positive stance towards English. Also, their concentration span is high, especially when the topic discussed is relevant to their needs and interests. The coursebook used is called 'Insider' and it is an exam preparation book. It includes thematic vocabulary, grammar taught in context, reading training and reading comprehension activities, listening, speaking and writing activities, while at the same time, all language skills are practiced and developed equally. The speaking lesson that is evaluated can be found in the ninth unit of the book with the title 'Crime and Punishment' and it contains four speaking tasks.

2. Evaluation of the speaking activities of the coursebook

The main aims of the particular speaking lesson, which is presented within the Presentation-Practice- Production framework (Byrne, 1986: 3-4) to learners is to talk about crime and punishment, familiarize them with these ideas, teach them relevant vocabulary and useful phrases, produce well-formed oral texts and improve their critical thinking skills.

In the presentation stage, there is one pre-communicative quasi-communicative activity (Littlewood, 1981), since the focus is on guiding learners on how to use different lexical items within a sentence. In this activity, learners are supposed to read a question and the examples given and answer it, using some of the words/ phrases/ ideas provided. In this way, they are expected to produce long well- formed sentences according to the example. In other words, according to Beaumont, this non-reality form- focused activity (Brown & Nation, 1997) exhibits the feature of control, there is no real communication at all and the purpose is speaking to learn, since learners speak exclusively to use language forms accurately to express their mind (West, 2000). According to Nation (1989: 24-29), there are 5 features, determining how interesting and successful a speaking activity can be. These are

roles (each participant has a distinct role determining his participation in the task), outcomes (provide learners a specific goal to achieve through the task), procedure (the activity is divided into some steps), split information (every participant has different information that shares for the purposes of the task) and challenges (elements such as time limitation or hidden solution contributing to learners' motivation during the task). In this activity, there are no roles, outcomes or procedures. Moreover, there is neither split information, but rather a kind of brainstorming related to the rules one has to follow at home nor challenges, since there is no competition, a hidden solution or even time limitation. Furthermore, according to Johnson (1982: 163-175), there are five principles that can be found in the sequence of the activities, such as the information gap principle (speakers share necessary information for the task through their exchanges), the information transfer principle (speakers transfer information from a source to another), the jigsaw principle (speakers collect their information to complete their 'jigsaw'), the task-dependency principle (speakers use the information they receive from the task during it) and the correction for content principle (speakers' language production is judged on its efficacy upon a specific task). This activity meets only the information gap principle and more specifically, it is an opinion gap activity (Prabhu, 1987: 46-47), where learners express their opinion in a given situation.

In the practice stage, there are two speaking activities. In the first one, which is a speaking to learn activity (West, 2000), learners are supposed to answer 3 questions on students' punishment, teachers' role when students cheat in a test and a more general one on criminality rate. According to Nation's principles, there are no roles assigned, as learners are only seen as answer providers, no outcomes, no procedures, since they should only answer the three questions, no split information nor challenges. This non-reality functional activity (Littlewood, 1981:22) could improve, if the teacher assigned roles to learners (headmaster, teachers, students) to act-out a role-playing or simulation activity, by participating actively in the whole process collecting data on crimes and punishment, exchanging information and having time limitations to keep them motivated. Regarding Johnson's principles, this is an opinion gap activity, because learners are asked to state their opinion, while the rest principles such as the information transfer, the jigsaw, the task dependency and the correction for content are not met. Finally, there is neither control in terms of the learners' language production, since they can freely express their thoughts nor communication among speakers. In the second task of the practice stage, which is a non-reality functional activity (Littlewood, 1981:22) learners are asked to engage in a discussion with their partners on different types of punishment for those that commit the crimes from the list given and then, justify the reasons why people break the laws. Learners are also provided with a bank with expressions and vocabulary related to penalties to use. Concerning Nation's features, no roles are assigned, while there is an outcome as learners should choose a crime from the list every time and match it with a type of punishment from the vocabulary bank. Additionally, there is procedure because learners are supposed to listen to the question, choose an item from a list, select the most suitable punishment from the word bank, relate it and express themselves either in a more controlled (1st part of the activity: the answer is more controlled based on the predetermined lexical items offered to learners) or in a less controlled way (2nd part of the activity: based on their answers learners must answer a more general question without any guidance). Furthermore, there is no split information nor challenge. According to Johnson's principles, this is an information transfer activity, as learners convey information from a list and transfer it to match it to the different types of punishment from the word bank. It is an information gap activity as well, as the two participants exchange information through their discussion and a task-dependency activity, since the speakers use the information produced during the activity. Finally, in the 1st part of the task, there is control, since language production is restricted by the activity itself, as learners have to choose crimes for the list provided and answer the question, while in the 2nd there is loose control as speakers express their opinion more freely. In terms of communication, there is no real communication, but discussion and exchanges of ideas. So, this is a speaking to learn activity, as speaking serves as a means of language practice (West, 2000).

In the production stage, there is a learning to speak task (West, 2001: 2-11), where learners are presented with two different situations and they are supposed to respond by producing at least four oral clauses, including a complex sentence. Also, the role of the teacher as interlocutor is mentioned. In other words, this is a reality social interaction activity and more specifically, a guided role-play (West, 2000). In the first situation, there are two roles (victim-whose bag was stolen/ police officer), while in the second situation there are two other roles (student- witness/ headmaster). In both situations, learners must describe the incidents to their pairs in detail and express their thoughts on them. Thus, according to Nation's principles, there are roles assigned to learners, while the outcome is to report an incident (stolen bag/ bullying) to someone else so as to deal with this problem. Additionally, there is procedure as learners are supposed to describe an incident, give account of what happened and express their opinion. In other words, there are certain steps till the solution of the problem. Moreover, there is split information since each speaker possesses some information that the other does not, so they need to interact in order to share it. Finally, there is challenge, because learners are given quantity limitation, since they are asked to produce at least 4 sentences in their descriptions. Regarding Johnson's principles, this is an information gap and task-dependency activity, because interlocutors exchange necessary information for each other, while simultaneously they use the information produced during the activity. In addition, control is present since there are instructions on the amount of learners' language production, while there is real communication (McDonough & Shaw, 1993; Nunan, 1987; Richards, 1990), since through this role- playing activity learners are offered the chance to use language in a realistic context for a realistic purpose, something that increases their participation and maximizes their interpersonal skills and their performance (Hedge, 2000: 280). The particular activity could improve if there was time limitation or more roles were assigned to learners.

All in all, the main focus of the particular speaking lesson is speaking itself as in the presentation stage learners are given a warm-up question to focus so as to familiarize themselves with the topic, in the practice stage, the actual speaking takes place, while in the production stage there is a role-playing activity (Harmer, 2001; Thornbury, 2005; Solvoca, 2001), where learners apply the already taught vocabulary, express themselves and interact with the rest speakers. Finally, the textbook's impact on the learners' speaking performance is essential. On the one hand, learners are given the chance to move from the first to the last activity smoothly, that is from more controlled / guided to less controlled and more real- life social activities. On the other hand, there are many times, where learners cannot express themselves freely, because they have to follow a model or some pre-determined ideas/ lexical items. Also, there are not enough real-life role playing and information gap activities, while there is no reference to feedback, key factor for the improvement of learners' performance (West, 2000).

3. Evaluation of the original speaking lesson and its activities

The purpose of the particular speaking lesson, which is presented within the Pre- While- Post-speaking framework, is to foster learners' speaking skills through 'real life' communicative activities and make them aware of bullying at school, improving their collaboration and interaction skills through the role- playing activities (Harmer, 2001; Thornbury, 2005; Solvoca, 2001).

In the pre- speaking stage, there is a pre-communicative activity (Littlewood, 1981) asking learners to look at the picture and answer the three questions on bullying in pairs. Its aim is to activate their background schemata and motivate them to interact with their classmates. According to Nation's principles, in this activity there are no roles, outcomes, procedures, split information, nor challenges. As far as Johnson's principles concerned, this is an information transfer activity, since the speakers extract some information from the picture so as to use it to answer the questions about the people, the place and the bullying incident itself, while at the same time it is an information gap activity, since speakers exchange some information so as to deal with the task. Concerning Beaumont's

classification features, there is neither control nor real communication, but just exchanges of predictions, opinions and experiences.

In the while-speaking stage, there are two activities. In the first one, learners are supposed to watch a YouTube video on Bullying at school and take notes, either as the bully of the story or the bullied one, according to the tasksheet they are given by their teacher. Then, in pairs they present the story from both sides to their classmates. In other words, this is a learning to speak activity, as learners are given the opportunity to take roles and present their own point of view to others. So, the main goal is fluency and language production. In terms of Nation's principles, there are roles since speakers are either the victim or the victimizer of the story, an outcome, because learners have a specific purpose, that of presenting the story from someone's side and a procedure, as there are specific steps that they must follow (watch video/ note-taking/ presentation), so as to reach their final goal. Moreover, there is split information, since in every pair speaker A takes notes exclusively about the bully, while speaker B about the bullied of the story and in the end, they share this information. Concerning the last feature, there are no challenges. According to Johnson's principles, this is both an information transfer (speakers extract information from the video and use it later on) and an information gap activity (they exchange necessary for each other information). Also, it follows the jigsaw principle as in every pair each learner possesses valuable information that exchanges to complete the jigsaw puzzle, that is the complete oral presentation of the story and a task- dependency activity, since the information offered in the activity through the video is used and reproduced by the interlocutors. Concerning control, there is minor, whereas there is no real communication between speakers, but just transmission of information. The second activity of the while-speaking stage, which is a learning to speak social interaction activity and more specifically, a role-play (Harmer, 1984; Tompkins, 2001) asks speakers to form pairs and take roles as psychologists and bullied students and act out a dialogue about the latest bullying experience they had. Its purpose is to encourage learners to participate actively in the speaking process, interact and develop their social and communicative competence skills (Canales & Swain, 1980). In this activity, there are roles (psychologist/ bullied student), outcomes (working towards the completion of a story- describing the bullying incident) and certain steps to achieve this goal (procedure). Additionally, there is split information as the bullied student offers valuable for their exchange information to the psychologist and challenge, since there is time limit, as the dialogue must be held within 10 minutes. Furthermore, this is an information gap (exchange of information) and a task- dependency activity (speakers use the information produced during the activity), whereas there is loose control and real communication between interlocutors.

In the post-speaking stage, there is a social interaction activity -a 12-minute-role-play, where learners are supposed to imagine themselves reporting a bullying incident to the headmaster of their school in detail. Its purpose is to enhance learners' cooperation, their interaction and collaboration skills and develop their speaking skills in a real- life communicative context and that is the reason why the task's focus is learning to speak. Regarding Nation's features, there are four different roles assigned to learners (bully, bullied, headmaster, classmate-witness) and a challenge (12-minute-role-play). In addition, there is an outcome (reporting a problem, problem- solving), a procedure (learners perform roles, report the bullying incident to the headmaster) and split information, since the speakers do not possess the same information, but exchange theirs in their interaction for the task's purpose. Concerning Johnson's principles, this is an information gap and task- dependency activity, where there is loose control only in terms of the amount of time speakers are able to interact (12 minutes) and real communication, since there is meaningful and purposeful communication through their exchanges.

Finally, there is a self- assessment activity, where learners are supposed to assess themselves according to what they are able to do during and after the speaking lesson, receiving thus learner feedback (West, 2000).

All in all, speaking has a central role in this lesson, while there is integration of listening (watch the YouTube video/ teacher's instructions-questions), writing (note-taking) and reading skills (learners read their notes and use them to present the story). In the pre-speaking stage, learners are

provided with a visual to activate their content and background schemata and answer some follow-up questions. In the while-speaking stage, the actual speaking takes place (presentation of a story/ role playing). In the post-speaking, there is a longer role-playing activity. In general, role-playing has an essential role in this speaking lesson, since it puts learners into 'real life' situations that they may encounter outside class and it contributes to the development of their sociolinguistic competence (Bahrani & Soltani, 2012). The last task is followed by a self-assessment activity, which provides the learner with constructive feedback.

4. Conclusion

The original speaking lesson was suitable for the learners' CEF level (B1-B2) and the activities were quite satisfactory according to Nation's, Johnson's and Beaumont's criteria. Also, the focus was on learning to speak (genuine communication) and language production, since most of the activities were communicative and interactive (Hedge, 2000: 273-276). More specifically, the role-playing activities were very beneficial and helpful for learners as they motivated them participate actively in the whole speaking process and guided them successfully than just discussing something freely without any kind of guidance (Hedge, 2000: 280). Finally, they offered real-life context to learners (Johnson, 1982: 156-162), personalized language as they could express themselves without any restrictions and boosted their confidence and self-esteem (Holt & Kysilka, 2006). In other words, successful and purposeful speaking requires active participation of all learners, real-life situations and communicative activities (ex. conveying a telephone message), such as role-playing and simulations (Goh & Burns, 2012: 151-152), pair/ group work (Bahrami & Soltani, 2012), guidance when necessary, teachers' role as motivators and managers and positive reinforcement through purposeful feedback (Anuradha et al, 2014), while its main focus should be fluency (Cornett & Nunan, 1999) and communicative competence (Nunan, 1991).

Finally, we must highlight the productive and effective role of digital technologies in the field of education. These technologies, which include mobile devices (28-32), a variety of ICTs (33-56), AI & STEM ROBOTICS (57-73), and games (74-77), facilitate and improve educational procedures such as assessment, intervention, and instruction. In addition, the use of ICTs in conjunction with theories and models of metacognition, mindfulness, meditation, and emotional intelligence cultivation [78-122], as well as with environmental factors and nutrition [24-27], accelerates and enhances educational practices and outcomes, particularly for language learning practices.

5. References

- [1] Anjaniputra, A. G. (2013). Teacher's strategies in teaching speaking to students at secondary level. *Journal of English and Education*, 1(2), 1-8.
- [2] Bahrani, T., & Soltani, R. (2012). How to teach speaking skill. *Journal of education and Practice*, 3(2), 25-29.
- [3] Bailey, K. M. (2003). *Speaking. Practical English language teaching*, 47-66.
- [4] Brown, R. S., & Nation, P. (1997). *Teaching speaking: Suggestions for the classroom. Language Teacher- Kyoto-Jalt-*, 21, 11-15.
- [5] Burns, A. (1998). *Teaching speaking. Annual Review of Applied Linguistics*, 18, 102-123.
- [6] Byrne, D. (1986). *Teaching Oral English. Harlow: Longman*.
- [7] Council of Europe (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Cambridge: Cambridge University Press*.
- [8] Crookall, D. (1984). The use of non-ELT simulations. *ELT Journal*, 38(4), 262-273.
- [9] Hedge, T. (2001). *Teaching and learning in the language classroom (106). Oxford university press*.

- [10] Hill, M. (2018). "Teaching Speaking: Applying Theory to Practice". In N. Sifakis, A. Georgountzou & M. Hill, AGG11: Introduction to the M.Ed. Teaching Oracy Skills: Listening and Speaking. Patras: Hellenic Open University.
- [11] Hill, M. (2018). "What and how to teach: teaching real speaking in the L2 context and establishing communicative criteria". In N. Sifakis, A. Georgountzou & M. Hill, AGG11: Introduction to the M.Ed. Teaching Oracy Skills: Listening and Speaking. Patras: Hellenic Open University.
- [12] Hill, M. (2018). "Developing materials and analyzing techniques for teaching spoken English". In N. Sifakis, A. Georgountzou & M. Hill, AGG11: Introduction to the M.Ed. Teaching Oracy Skills: Listening and Speaking. Patras: Hellenic Open University.
- [13] Hill, M. (2018). "Social interaction activities - Reality techniques". In N. Sifakis, A. Georgountzou & M. Hill, AGG11: Introduction to the M.Ed. Teaching Oracy Skills: Listening and Speaking. Patras: Hellenic Open University.
- [14] Hill, M. (2018). "Ways to teach speaking: constructing frameworks to incorporate speaking practice in the lesson". In N. Sifakis, A. Georgountzou & M. Hill, AGG11: Introduction to the M.Ed. Teaching Oracy Skills: Listening and Speaking. Patras: Hellenic Open University.
- [15] Hussain, S. (2017). Teaching speaking skills in communication classroom. *International Journal of Media, Journalism and Mass Communications*, 3(3), 14-21.
- [16] Johnson, K. (1997). *Language teaching and skill learning*. Oxford, England: Blackwell.
- [17] Kayi, H. (2006). Teaching speaking: Activities to promote speaking in a second language. *The internet TESL journal*, 12(11), 1-6.
- [18] Krebt, D. M. (2017). The effectiveness of role play techniques in teaching speaking for EFL college students. *Journal of Language Teaching and Research*, 8(5), 863.
- [19] Loukeri, A & Zerva, C.E. (2019). *Insider*. Super Course ELT Publishing.
- [20] Nation, P. (1989). Speaking activities: Five features. *ELT Journal*, 43(1), 24-29.
- [21] Suryani, L. (2015). The effectiveness of role play in teaching speaking. *Eltin Journal*, L, *Journal of English Language Teaching in Indonesia*, 3(2).
- [22] West, R. (2000) *The Teaching of Speaking Skills in a Second/ Foreign Language*. (3,4).
- [23] Zhao, J. (2018). Lesson Planning for Teaching Speaking. *The TESOL Encyclopedia of English Language Teaching*, 1-8.
- [24] Stavridou Th., Driga, A.M., Drigas, A.S., 2021. Blood Markers in Detection of Autism, *International Journal of Recent Contributions from Engineering Science & IT (iJES)* 9(2):79-86.
- [25] Zavitsanou, A., & Drigas, A. (2021). Nutrition in mental and physical health. *Technium Soc. Sci. J.*, 23, 67.
- [26] Driga, A.M., Drigas, A.S. 2019 "Climate Change 101: How Everyday Activities Contribute to the Ever-Growing Issue", *International Journal of Recent Contributions from Engineering, Science & IT*, vol. 7(1), pp. 22-31. <https://doi.org/10.3991/ijes.v7i1.10031>
- [27] Driga, A.M., and Drigas, A.S. 2019 "ADHD in the Early Years: Pre-Natal and Early Causes and Alternative Ways of Dealing." *International Journal of Online and Biomedical Engineering (IJOE)*, vol. 15, no. 13, p. 95., doi:10.3991/ijoe.v15i13.11203
- [28] Stathopoulou, et all 2018, Mobile assessment procedures for mental health and literacy skills in education. *International Journal of Interactive Mobile Technologies*, 12(3), 21-37,
- [29] Kokkalia G, AS Drigas, A Economou 2016 Mobile learning for preschool education. *International Journal of Interactive Mobile Technologies* 10 (4)
- [30] Stathopoulou A, Karabatzaki Z, Tsiros D, Katsantoni S, Drigas A, 2019 Mobile apps the educational solution for autistic students in secondary education *Journal of Interactive Mobile Technologies* 13 (2), 89-101
- [31] Drigas A, DE Dede, S Dedes 2020 Mobile and other applications for mental imagery to improve learning disabilities and mental health *International Journal of Computer Science Issues (IJCSI)* 17 (4), 18-23

- [32] Alexopoulou A, Batsou A, Drigas A, 2020 Mobiles and cognition: The associations between mobile technology and cognitive flexibility *iJIM* 14(3) 146-156
- [33] Drigas, A. S., J.Vrettaros, L.Stavrou, D.Kouremenos, 2004. E-learning Environment for Deaf people in the E-Commerce and New Technologies Sector, *WSEAS Transactions on Information Science and Applications*, Issue 5, Volume 1, November
- [34] Drigas, A.S., Vrettaros, J. and Kouremenos, D. (2004) ‘Teleeducation and e-learning services for teaching English as a second language to deaf people, whose first language is the sign language’, *WSEAS Transactions on Information Science and Applications*, Vol. 1, No. 3, pp.834–842.
- [35] Drigas, A., Koukianakis, L., Papagerasimou, Y., 2011, Towards an ICT-based psychology: *Epsychology, Computers in Human Behavior*, 27:1416–1423. <https://doi.org/10.1016/j.chb.2010.07.045>
- [36] Drigas, A. S., Stavridis, G., & Koukianakis, L. (2004). A Modular Environment for E-learning and E-psychology Applications. *WSEAS Transactions on Computers*, 3(6), 2062-2067.
- [37] Papanastasiou, G., Drigas, A., Skianis, C., and Lytras, M. (2020). Brain computer interface based applications for training and rehabilitation of students with neurodevelopmental disorders. A literature review. *Heliyon* 6:e04250. doi: 10.1016/j.heliyon.2020.e04250
- [38] Drigas, A. S., John Vrettaros, and Dimitris Kouremenos, 2005. “An e-learning management system for the deaf people,” *AIKED ’05: Proceedings of the Fourth WSEAS International Conference on Artificial Intelligence, Knowledge Engineering Data Bases*, article number 28.
- [39] Pappas, M.A., & Drigas, A.S. (2015). ICT based screening tools and etiology of dyscalculia. *International Journal of Engineering Pedagogy*, (5)3, 61-66.
- [40] Drigas, A., & Kostas, I. (2014). On Line and other ICTs Applications for teaching math in Special Education. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 2(4), pp-46. <http://dx.doi.org/10.3991/ijes.v2i4.4204>
- [41] Alexopoulou, A, Batsou, A, Drigas, A. (2019). Resilience and academic underachievement in gifted students: causes, consequences and strategic methods of prevention and intervention. *International Journal of Online and Biomedical Engineering (iJOE)*, vol. 15, no. 14, pp. 78.
- [42] Drigas, A. & Ioannidou, R. E. (2013). Special education and ICT's. *International Journal of Emerging Technologies in Learning* 8(2), 41– 47.
- [43] Drigas, A., & Papanastasiou, G. (2014). Interactive White Boards in Preschool and Primary Education. *International Journal of Online and Biomedical Engineering (iJOE)*, 10(4), 46–51. <https://doi.org/10.3991/ijoe.v10i4.3754>
- [44] Drigas, A. S. and Politi-Georgousi, S. (2019). Icts as a distinct detection approach for dyslexia screening: A contemporary view. *International Journal of Online and Biomedical Engineering (iJOE)*, 15(13):46–60.
- [45] Lizeta N. Bakola, Nikolaos D. Rizos, Drigas, A. S., 2019 “ICTs for Emotional and Social Skills Development for Children with ADHD and ASD Co-existence” *International Int. J. Emerg. Technol. Learn.*, 14(5), 122-131.
- [46] Kontostavrou, E.Z., & Drigas, A.S. (2019). The Use of Information and Communications Technology (ICT) in Gifted Students. *International Journal of Recent Contributions from Engineering, Science and IT*, 7(2), 60-67. doi:10.3991/ijes.v7i2.10815
- [47] Drigas, A. S., and Vlachou J. A., 2016. “Information and communication technologies (ICTs) and autistic spectrum disorders (ASD),” *Int. J. Recent Contrib. Eng. Sci. IT (iJES)*, vol. 4, no. 1, p. 4, <https://doi.org/10.3991/ijes.v4i1.5352>
- [48] Drigas, A. S., Koukianakis, L, Papagerasimou, Y. (2006) “An elearning environment for nontraditional students with sight disabilities.”, *Frontiers in Education Conference*, 36th Annual. IEEE, p. 23-27.
- [49] Drigas A., and Koukianakis L. 2006 An open distance learning e-system to support SMEs e-enterprising. In proceeding of 5th WSEAS Internationalconference on Artificial intelligence, knowledge engineering, data bases (AIKED 2006). Spain

- [50] Drigas A, Petrova A 2014 ICTs in speech and language therapy *International Journal of Engineering Pedagogy (iJEP)* 4 (1), 49-54
- [51] Bravou V, Oikonomidou D, Drigas A, 2022 Applications of Virtual Reality for Autism Inclusion. A review *Retos* 45, 779-785
- [52] Chaidi I, Drigas A, 2022 "Parents' views Questionnaire for the education of emotions in Autism Spectrum Disorder" in a Greek context and the role of ICTs *Technium Social Sciences Journal* 33, 73-91
- [53] Bravou V, Drigas A, 2019 A contemporary view on online and web tools for students with sensory & learning disabilities *iJOE* 15(12) 97
- [54] Drigas A, Vrettaros J, Tagoulis A, Kouremenos D, 2010 Teaching a foreign language to deaf people via vodcasting & web 2.0 tools *World Summit on Knowledge Society*, 514-521
- [55] Chaidi I, Drigas A, C Karagiannidis 2021 ICT in special education *Technium Soc. Sci. J.* 23, 187
- [56] Xanthopoulou M, Kokalia G, Drigas A, 2019, Applications for Children with Autism in Preschool and Primary Education. *Int. J. Recent Contributions Eng. Sci. IT* 7 (2), 4-16
- [57] Chaidi E, Kefalis C, Papagerasimou Y, Drigas, 2021, Educational robotics in Primary Education. A case in Greece, *Research, Society and Development* 10 (9), e17110916371-e17110916371
- [58] Drigas, A.S., Vrettaros, J., Koukianakis, L.G. and Glentzes, J.G. (2005). A Virtual Lab and e-learning system for renewable energy sources. *Int. Conf. on Educational Tech.*
- [59] Drigas, A., Dourou, A. (2013). A Review on ICTs, E-Learning and Artificial Intelligence for Dyslexic's Assistance. *iJet*, 8(4), 63-67.
- [60] Anagnostopoulou, P., Alexandropoulou, V., Lorentzou, G., Lykothanasi, A., Ntaountaki, P., & Drigas, A. (2020). Artificial intelligence in autism assessment. *International Journal of Emerging Technologies in Learning*, 15(6), 95-107. <https://doi.org/10.3991/ijet.v15i06.11231>
- [61] Pappas, M., & Drigas, A. (2016). Incorporation of artificial intelligence tutoring techniques in mathematics. *International Journal of Engineering Pedagogy*, 6(4), 12–16. <https://doi.org/10.3991/ijep.v6i4.6063>
- [62] Lytra N, Drigas A 2021 STEAM education-metacognition–Specific Learning Disabilities *Scientific Electronic Archives* 14 (10)
- [63] Mitsea E, Lytra N, A Akrivopoulou, A Drigas 2020 Metacognition, Mindfulness and Robots for Autism Inclusion. *Int. J. Recent Contributions Eng. Sci. IT* 8 (2), 4-20
- [64] Stavridis S, D Papageorgiou, Z Doulgeri 2017 Dynamical system based robotic motion generation with obstacle avoidance, *IEEE Robotics and Automation Letters* 2 (2), 712-718
- [65] Kastritsi T, D Papageorgiou, I Sarantopoulos, S Stavridis, Z Doulgeri, 2019 Guaranteed active constraints enforcement on point cloud-approximated regions for surgical applications 2019 *International Conference on Robotics and Automation (ICRA)*, 8346-8352
- [66] Stavridis S, Z Doulgeri 2018 Bimanual assembly of two parts with relative motion generation and task related optimization 2018 *IEEE/RSJ International Conference on Intelligent Robots and Systems ...*
- [67] Stavridis S, P Falco, Z Doulgeri 2020 Pick-and-place in dynamic environments with a mobile dual-arm robot equipped with distributed distance sensors *IEEE-RAS 20th International Conference on Humanoid Robots (Humanoids)*
- [68] Papageorgiou D, S Stavridis, C Papakonstantinou, Z Doulgeri 2021 Task geometry aware assistance for kinesthetic teaching of redundant robots *IEEE/RSJ International Conference on Intelligent Robots and Systems ...*
- [69] Kastritsi T, I Sarantopoulos, S Stavridis, D Papageorgiou, Z Doulgeri Manipulation of a Whole Surgical Tool Within Safe Regions Utilizing Barrier Artificial Potentials *Mediterranean Conference on Medical and Biological Engineering and Computing ...*
- [70] Stavridis S, D Papageorgiou, L Droukas, Z Doulgeri 2022 Bimanual crop manipulation for human-inspired robotic harvesting *arXiv preprint arXiv:2209.06074*

- [71] Stavridis S, Papageorgiou D, Zoe Doulgeri, 2022, Kinesthetic teaching of bi-manual tasks with known relative constraints, Conference: 2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS-2022) Kyoto, Japan
- [72] Ntaountaki P, et al 2019 Robotics in Autism Intervention. *Int. J. Recent Contributions Eng. Sci. IT* 7 (4), 4-17
- [73] Demertzi E, Voukelatos N, Papagerasimou Y, Drigas A, 2018 Online learning facilities to support coding and robotics courses for youth *International Journal of Engineering Pedagogy (iJEP)* 8 (3), 69-80
- [74] Chaidi I, Drigas A 2022 Digital games & special education *Technium Social Sciences Journal* 34, 214-236
- [75] Doulou A, Drigas A 2022 Electronic, VR & Augmented Reality Games for Intervention in ADHD *Technium Social Sciences Journal*, 28, 159.
- [76] Kokkalia, G., Drigas, A., & Economou, A. (2016). The role of games in special preschool education. *International Journal of Emerging Technologies in Learning (iJET)*, 11(12), 30-35.
- [77] Kefalis C, Kontostavlou EZ, Drigas A, 2020 The Effects of Video Games in Memory and Attention. *Int. J. Eng. Pedagog.* 10 (1), 51-61
- [78] Drigas, A., & Mitsea, E. (2020). The 8 Pillars of Metacognition. *International Journal of Emerging Technologies in Learning (iJET)*, 15(21), 162-178. <https://doi.org/10.3991/ijet.v15i21.14907>
- [79] Drigas, A. S., and M. Pappas, 2017. "The Consciousness-Intelligence-Knowledge Pyramid: An 8x8 Layer Model," *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, vol. 5, no.3, pp 14-25, <https://doi.org/10.3991/ijes.v5i3.7680>
- [80] Drigas A, Karyotaki M (2017) Attentional control and other executive functions. *Int J Emerg Technol Learn iJET* 12(03):219–233
- [81] Drigas A, Karyotaki M 2014. Learning Tools and Application for Cognitive Improvement. *International Journal of Engineering Pedagogy*, 4(3): 71-77. From (Retrieved on 13 May 2016)
- [82] Drigas, A., & Mitsea, E. (2021). 8 Pillars X 8 Layers Model of Metacognition: Educational Strategies, Exercises & Trainings. *International Journal of Online & Biomedical Engineering*, 17(8). <https://doi.org/10.3991/ijoe.v17i08.23563>
- [83] Drigas A., Papoutsi C. (2020). The Need for Emotional Intelligence Training Education in Critical and Stressful Situations: The Case of COVID-19. *Int. J. Recent Contrib. Eng. Sci. IT* 8(3), 20–35. [10.3991/ijes.v8i3.17235](https://doi.org/10.3991/ijes.v8i3.17235)
- [84] Kokkalia, G., Drigas, A. Economou, A., & Roussos, P. (2019). School readiness from kindergarten to primary school. *International Journal of Emerging Technologies in Learning*, 14(11), 4-18.
- [85] Pappas M, Drigas A. 2019; Computerized Training for Neuroplasticity and Cognitive Improvement. *International Journal of Engineering Pedagogy*.9(4):50-62
- [86] Papoutsi, C. and Drigas, A. (2017) Empathy and Mobile Applications. *International Journal of Interactive Mobile Technologies* 11(3). 57. <https://doi.org/10.3991/ijim.v11i3.6385>
- [87] Papoutsi, C. & Drigas, A. (2016). Games for Empathy for Social Impact. *International Journal of Engineering Pedagogy* 6(4), 36-40.
- [88] Karyotaki, M., & Drigas, A. (2015). Online and other ICT Applications for Cognitive Training and Assessment. *International Journal of Online and Biomedical Engineering*. 11(2), 36-42.
- [89] Papoutsi, C., Drigas, A., & Skianis, C. (2019). Emotional intelligence as an important asset for HR in organizations: Attitudes and working variables. *International Journal of Advanced Corporate Learning*, 12(2), 21–35. <https://doi.org/10.3991/ijac.v12i2.9620>
- [90] Chaidi I. Drigas, A. S., 2020. "Autism, Expression, and Understanding of Emotions: Literature Review," *Int. J. Online Biomed. Eng.*, vol. 16, no. 02, pp. 94–111, <https://doi.org/10.3991/ijoe.v16i02.11991>

- [91] Drigas, A. S., & Karyotaki, M. (2019). A Layered Model of Human Consciousness. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 7(3), 41- 50. <https://doi.org/10.3991/ijes.v7i3.11117>
- [92] Drigas, A. S., Karyotaki, M., & Skianis, C. (2018). An Integrated Approach to Neurodevelopment, Neuroplasticity and Cognitive Improvement. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 6(3), 4-18.
- [93] Karyotaki M. and Drigas, A. S., 2016. "Latest trends in problem solving assessment," *International Journal of Recent contributions from Engineering, Science & IT (iJES)*, vol. 4, no. 2, 4-10.
- [94] Mitsea E., Drigas, A. S., and Mantas P., 2021. Soft Skills & Metacognition as Inclusion Amplifiers in the 21st Century," *Int. J. Online Biomed. Eng. IJOE*, vol. 17, no. 04, Art. no. 04, <https://doi.org/10.3991/ijoe.v17i04.20567>
- [95] Angelopoulou, E. Drigas, A. (2021). Working Memory, Attention and their Relationship: A theoretical Overview. *Research. Society and Development*, 10(5), 1-8. <https://doi.org/10.33448/rsd-v10i5.15288>
- [96] Tourimpampa, A., Drigas, A., Economou, A., & Roussos, P. (2018). Perception and text comprehension. It's a matter of perception! *International Journal of Emerging Technologies in Learning (iJET)*. 13(7)
- [97] Drigas A, Mitsea E 2020 A metacognition based 8 pillars mindfulness model and training strategies. *International Journal of Recent Contributions from Engineering, Science & IT* 8(4), 4-17.
- [98] Papoutsis C, Drigas A, C Skianis 2021 Virtual and augmented reality for developing emotional intelligence skills *Int. J. Recent Contrib. Eng. Sci. IT (IJES)* 9 (3), 35-53
- [99] Kapsi S, Katsantoni S, Drigas A 2020 The Role of Sleep and Impact on Brain and Learning. *Int. J. Recent Contributions Eng. Sci. IT* 8 (3), 59-68
- [100] Drigas A, Mitsea E, Skianis C 2021 The Role of Clinical Hypnosis and VR in Special Education *International Journal of Recent Contributions from Engineering Science & IT (iJES)* 9(4), 4-17.
- [101] V Galitskaya, A Drigas 2021 The importance of working memory in children with Dyscalculia and Ageometria *Scientific Electronic Archives* 14 (10)
- [102] Chaidi I, Drigas A 2020 Parents' Involvement in the Education of their Children with Autism: Related Research and its Results *International Journal Of Emerging Technologies In Learning (Ijet)* 15 (14), 194-203.
- [103] Drigas A, Mitsea E 2021 Neuro-Linguistic Programming & VR via the 8 Pillars of Metacognition X 8 Layers of Consciousness X 8 Intelligences *Technium Soc. Sci. J.* 26, 159
- [104] Drigas A, Mitsea E 2022 Conscious Breathing: a Powerful Tool for Physical & Neuropsychological Regulation. The role of Mobile Apps *Technium Social Sciences Journal* 28, 135-158
- [105] Drigas A, Mitsea E, C Skianis 2022 Clinical Hypnosis & VR, Subconscious Restructuring-Brain Rewiring & the Entanglement with the 8 Pillars of Metacognition X 8 Layers of Consciousness X 8 Intelligences. *International Journal of Online & Biomedical Engineering (IJOE)* 18 (1)
- [106] Drigas A, Karyotaki M 2019 Attention and its Role: Theories and Models. *International Journal of Emerging Technologies in Learning* 14 (12), 169-182
- [107] Drigas A, Karyotaki M 2019 Executive Functioning and Problem Solving: A Bidirectional Relation. *International Journal of Engineering Pedagogy (iJEP)* 9 (3)
- [108] Bamicha V, Drigas A 2022 ToM & ASD: The interconnection of Theory of Mind with the social-emotional, cognitive development of children with Autism Spectrum Disorder. The use of ICTs as an alternative form of intervention in ASD *Technium Social Sciences Journal* 33, 42-72
- [109] Drigas A, Mitsea E, C Skianis 2022 Neuro-Linguistic Programming, Positive Psychology & VR in Special Education. *Scientific Electronic Archives* 15 (1)
- [110] Drigas A, Mitsea E, Skianis C. 2022 Virtual Reality and Metacognition Training Techniques for Learning Disabilities *SUSTAINABILITY* 14(16), 10170

- [111] Drigas A., Sideraki A. 2021 Emotional Intelligence in Autism Technium Soc. Sci. J. 26, 80
- [112] Drigas A, Mitsea E, Skianis C.. 2022 Subliminal Training Techniques for Cognitive, Emotional and Behavioural Balance. The role of Emerging Technologies Technium Social Sciences Journal 33, 164-186
- [113] Bakola L, Drigas A, 2020 Technological development process of emotional Intelligence as a therapeutic recovery implement in children with ADHD and ASD comorbidity. . International Journal of Online & Biomedical Engineering, 16(3), 75-85
- [114] Bamicha V, Drigas A, 2022 The Evolutionary Course of Theory of Mind - Factors that facilitate or inhibit its operation & the role of ICTs Technium Social Sciences Journal 30, 138-158
- [115] Karyotaki M, Bakola L, Drigas A, Skianis C, 2022 Women's Leadership via Digital Technology and Entrepreneurship in business and society Technium Social Sciences Journal. 28(1), 246-252.
- [116] Drigas A, Bakola L, 2021The 8x8 Layer Model Consciousness-Intelligence-Knowledge Pyramid, and the Platonic Perspectives International Journal of Recent Contributions from Engineering, Science & IT (iJES) 9(2) 57-72
- [117] Karyotaki M, Drigas A, 2016 Online and Other ICT-based Training Tools for Problem-solving Skills. International Journal of Emerging Technologies in Learning 11 (6)
- [118] Mitsea E, Drigas A., Skianis C, 2022 Breathing, Attention & Consciousness in Sync: The role of Breathing Training, Metacognition & Virtual Reality Technium Social Sciences Journal 29, 79-97
- [119] Mitsea E, Drigas A, Skianis C, 2022 ICTs and Speed Learning in Special Education: High-Consciousness Training Strategies for High-Capacity Learners through Metacognition Lens Technium Soc. Sci. J. 27, 230
- [120] Drigas A, Karyotaki M, Skianis C, 2017 Success: A 9 layered-based model of giftedness International Journal of Recent Contributions from Engineering, Science & IT 5(4) 4-18
- [121] Drigas A, Papoutsi C, 2021,Nine Layer Pyramid Model Questionnaire for Emotional Intelligence, International Journal of Online & Biomedical Engineering 17 (7)
- [122] Drigas A, Papoutsi C, Skianis, 2021, Metacognitive and Metaemotional Training Strategies through the Nine-layer Pyramid Model of Emotional Intelligence, International Journal of Recent Contributions from Engineering, Science & IT (iJES) 9.4 58-76

https://www.youtube.com/watchv=FYVvE4tr2BI&t=18s&ab_channel=TheChurchofJesusChristofLatter-daySaints

Appendix ii

Original Lesson Plan

‘Bullying at school’

Class profile: 1st grade of a Greek junior high school

Age: 12-13 years old

Number of learners: 16

Level: B1-B2

Time: 45 min

Materials: YouTube video, a laptop, photo, two tasksheets

Purpose: To foster Ls’ speaking skills through a ‘real-life’ communicative setting.

Specific objectives:

1. To develop Ls’ speaking skills
2. To raise Ls’ communicative skills
3. To enhance Ls’ interaction and collaboration skills
4. To make Ls aware of bullying at school

Procedure	Aims	Time
Pre-speaking stage		
Teacher (T) hands in the tasksheets to all learners (Ls). There are two different ones (tasksheet A and tasksheet B).		
Ls look at the picture carefully and prepare themselves to answer the questions that follow.	To activate Ls’ background schemata. To foster their prediction skills.	1min
Ls answer the questions about bullying in pairs.	To motivate Ls to interact with their classmates.	5 min

<p>While-speaking stage</p> <p>Ls watch a YouTube video on bullying and take notes as victims or victimizers, according their tasksheets.</p> <p>Ls present the story they watched in pairs from the victim's / victimizer's perspective to their classmates.</p> <p>The teacher sets the scene: Ls imagine they are a 12-year-old bullied student, who visits a psychologist to talk about the last bullying experience he/ she had at school. The psychologist asks questions about the incident and they are supposed to offer detailed information about that day though a 10-minute dialogue in pairs.</p>	<p>To motivate Ls through technology.</p> <p>To create a 'real-life' context.</p> <p>Skills integration (listening and writing).</p> <p>To check comprehension.</p> <p>To encourage Ls to give an overall presentation of the story, from both perspectives.</p> <p>To encourage Ls act out a 'real-life' dialogue.</p> <p>To enhance pair work.</p> <p>To create a 'real-life' communicative setting.</p> <p>To promote Ls' interaction.</p>	<p>10 min</p> <p>6min</p> <p>10 min</p>
<p>Post-speaking stage</p> <p>The teacher sets the scene: Ls imagine that a 16-year-old boy makes fun of one of their classmates all the time and in groups of 4 (bully, bullied, classmate, headmaster), they are required to engage in a 12-minute-role-playing activity, reporting this bullying activity to the headmaster of their school, offering valuable piece of information.</p>	<p>To encourage Ls engage in a role-playing activity.</p> <p>To enhance group work.</p> <p>To create a 'real-life' communicative situation.</p> <p>To promote Ls' interaction.</p>	<p>12 min</p>

Feedback		
Ls are given a self-assessment questionnaire to fill in on what they are able to do in order to get some feedback as well.	To receive meaningful feedback.	1 min

Appendix iii

Tasksheet A

Pre-speaking stage:

1. Look at the photo carefully and in pairs, discuss the following:

- a. Who and where are they?
- b. What is this photo about?
- c. Have you or any of your friends ever been in a similar situation? How did you react?



While-speaking stage:

2. Watch the following YouTube video called ‘Bullying- Stop it’ (https://www.youtube.com/watchv=FYVvE4tr2BI&t=15s&ab_channel=TheChurchofJesusChristofLatter-daySaints) and take notes. Then, in pairs present the story from the victim’s perspective to your classmates.

	Bullied
People involved: Place: Time: Incident: Frequency: My feelings: The bully’s feelings: Solution:	

3. Imagine you are a 12-year-old bullied student and you visit a psychologist to talk about your latest bullying experience at school. The psychologist asks questions to find out what happened, who was involved in it and what were/ are your feelings. The victim gives detailed information about that day. Work in pairs to act out a 10-minute dialogue.

Post -speaking stage:

4. Imagine that a 16-year-old boy calls another student ‘dirty’, makes fun of him all the time, asks from their classmates to ignore him and knocks into him on purpose. In groups of 4 (bully, bullied, classmate, headmaster), you are required to engage in a 12-minute- role-playing activity, reporting this bullying activity to the headmaster of the school, offering valuable piece of information and details.

Self- Assessment/ Feedback:

Fill-in the boxes with +/- based on what you can/ can’t do.

I can:	+ / -
Predict something based on visuals (photos)	
Take notes while watching a video	
Act out a dialogue	
Present a story from any kind of perspective (bully/ bullied)	
Take turns while acting out a dialogue	
Engage in a role- playing activity	
Cooperate with the members of a group/ team	

Tasksheet B

Pre-speaking stage:

1. Look at the photo carefully and in pairs, discuss the following:

- a. Who and where are they?
- b. What is this photo about?
- c. Have you or any of your friends ever been in a similar situation? How did you react?



While-speaking stage:

2. Watch the following YouTube video called ‘Bullying- Stop it’ (https://www.youtube.com/watchv=FYVvE4tr2BI&t=15s&ab_channel=TheChurchofJesusChristofLatter-daySaints) and take notes. Then, in pairs present the story from the victimizer’s perspective to your classmates.

	Bully
People involved: Place: Time: Incident: Frequency: My feelings: The bullied’s feelings: Solution:	

3. Imagine you are a 12-year-old bullied student and you visit a psychologist to talk about your latest bullying experience at school. The psychologist asks questions to find out what

happened, who was involved and what were/ are your feelings. The victim gives detailed information about that day. Work in pairs to act out a 10-minute dialogue.

Post -speaking stage:

4. Imagine that a 16-year-old boy calls another student ‘dirty’, makes fun of him all the time, asks from their classmates to ignore him and knocks into him on purpose. In groups of 4 (bully, bullied, classmate, headmaster), you are required to engage in a 12-minute- role-playing activity, reporting this bullying activity to the headmaster of the school, offering valuable piece of information and details.

Self- Assessment/ Feedback:

Fill-in the boxes with + / - based on what you can/ can’t do.

I can:	+ / -
Predict something based on visuals	
Take notes while watching a video	
Act out a dialogue	
Present a story from any kind of perspective (bully/ bullied)	
Take turns while acting out a dialogue	
Engage in a role- playing activity	
Cooperate with the members of a group/ team	

Appendix iv

Table with Assessment Criteria- Coursebook's speaking activities

Nation's Principles

	Roles	Outcomes	Procedures	Split Information	Challenges
Activity 1	-	-	-	-	-
Activity 2	-	-	-	-	-
Activity 3	-	+	+	-	-
Activity 4	+	+	+	+	+

Johnson's Principles

	Information Transfer	Information Gap	Jigsaw Principle	Task dependency	Content for correction
Act. 1	-	+	-	-	-
Act. 2	-	+	-	-	-
Act. 3	+	+	-	+	-
Act. 4	-	+	-	+	-

Beaumont's Classification Features

	Control	Communication
Activity 1	+	-
Activity 2	-	-
Activity 3	+	-
Activity 4	+	+

Table with Assessment Criteria- Original Lesson Plan

Nation's Principles

	Roles	Outcomes	Procedures	Split Information	Challenges
Activity 1	-	-	-	-	-
Activity 2	+	+	+	+	-
Activity 3	+	+	+	+	+
Activity 4	+	+	+	+	+

Johnson's Principles

	Information Transfer	Information Gap	Jigsaw Principle	Task dependency	Content for correction
Act. 1	+	+	-	-	-
Act. 2	+	+	+	+	-
Act. 3	-	+	-	+	-
Act. 4	-	+	-	+	-

Beaumont's Classification Features

	Control	Communication
Activity 1	-	-
Activity 2	+	-
Activity 3	+	+
Activity 4	+	+