

研究語音對 DGBL 的玩家參與感的效果。

Title

JaeHwan Byu & Christian S. Loh (2015), "Audial engagement: Effects of game sound on learner engagement in digital game-based learning environments", Computers in Human Behavior 46, pp.129-138 (SSCI)

關鍵字：Audial engagement, DGBL, Game sound, voiceovers

Abstract:

<u>研究重要性</u>	Learner engagement 是影響 DGBL 成功的一項重要因素。但很少研究針對影響 learner engagement 的因素去研究。																								
<u>研究目的</u>	研究 NPC voiceover 對 play-learners' engagement in DGBL (RPG) 的效果。																								
<u>研究方法</u>	Randomized control-group post-test only design																								
<u>研究對象</u>	74 個中西部公立大學學生 (52 男、22 女)																								
<u>研究流程</u>	十五分鐘完成遊戲，玩家隨機被分到 VO 與 NVO 組別 (37 vs 37)，完成後填寫 mGEQ 問卷。																								
<u>研究工具</u>	<p>mGEQ 問卷 (Bryman & Cramer, 2001; Devellis, 2012; George & Mallery, 2003). 出處：Brockmyer et al. (2009).</p> <p style="text-align: center;">Items of the modified Game Engagement Questionnaire (mGEQ)</p> <hr/> <table style="width: 100%; border-collapse: collapse;"><thead><tr><th style="text-align: left; width: 5%;">#</th><th style="text-align: left;">Item</th></tr></thead><tbody><tr><td>1.</td><td>I lost track of time</td></tr><tr><td>2.</td><td>I was focused on the game rather than my surroundings</td></tr><tr><td>3.</td><td>I felt as if I was present at the High Harvest Fair</td></tr><tr><td>4.</td><td>I was disappointed when I had to stop playing the game</td></tr><tr><td>5*</td><td>I played without thinking about how to play</td></tr><tr><td>6.</td><td>Playing made me bored.</td></tr><tr><td>7.</td><td>Time seemed to stand still or stop</td></tr><tr><td>8.</td><td>While playing, I thought about nothing but the game story</td></tr><tr><td>9.</td><td>I felt like I just couldn't stop playing</td></tr><tr><td>10.</td><td>I was curious to see how the game would end</td></tr><tr><td>11.</td><td>I really got into the game</td></tr></tbody></table> <hr/> <p>* Removed due to a relatively low item-total correlation.</p>	#	Item	1.	I lost track of time	2.	I was focused on the game rather than my surroundings	3.	I felt as if I was present at the High Harvest Fair	4.	I was disappointed when I had to stop playing the game	5*	I played without thinking about how to play	6.	Playing made me bored.	7.	Time seemed to stand still or stop	8.	While playing, I thought about nothing but the game story	9.	I felt like I just couldn't stop playing	10.	I was curious to see how the game would end	11.	I really got into the game
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<u>研究素材</u>	Neverwine Nights 2 or NWN2 的 Game Developmet Kit																								
<u>研究結論</u>	有 voiceover 的效果相對於沒有 voiceover 的效果會讓玩家的參與度更高 (語音是有效的)																								

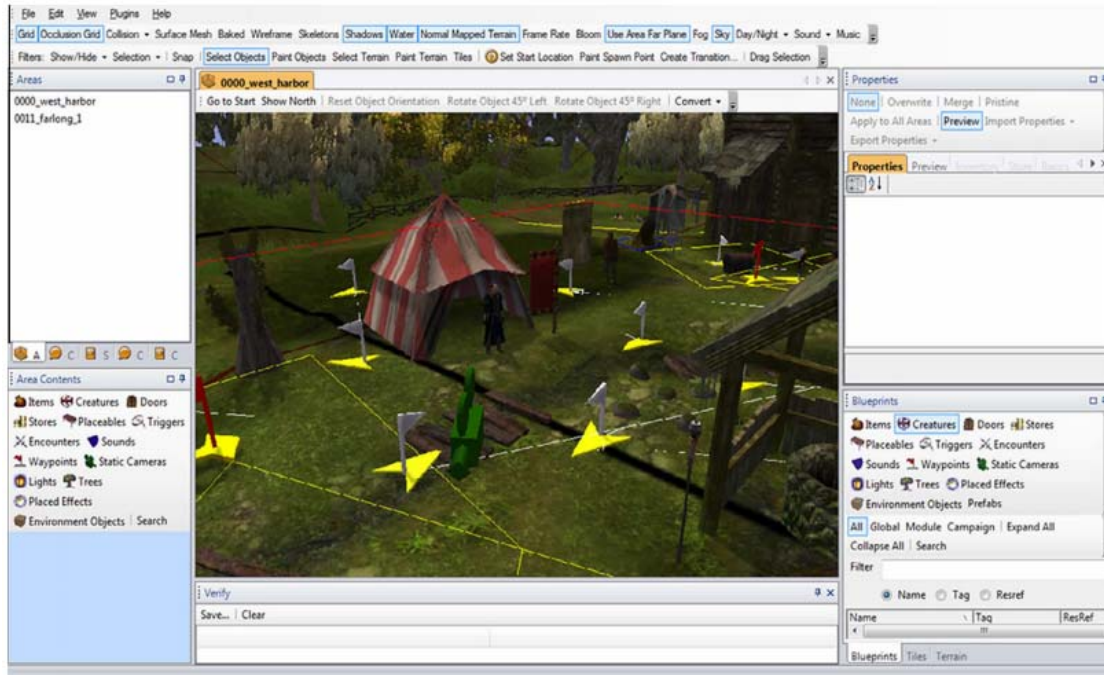


Fig. 1. Screenshot of the NWN 2 Game Development Kit (GDK).



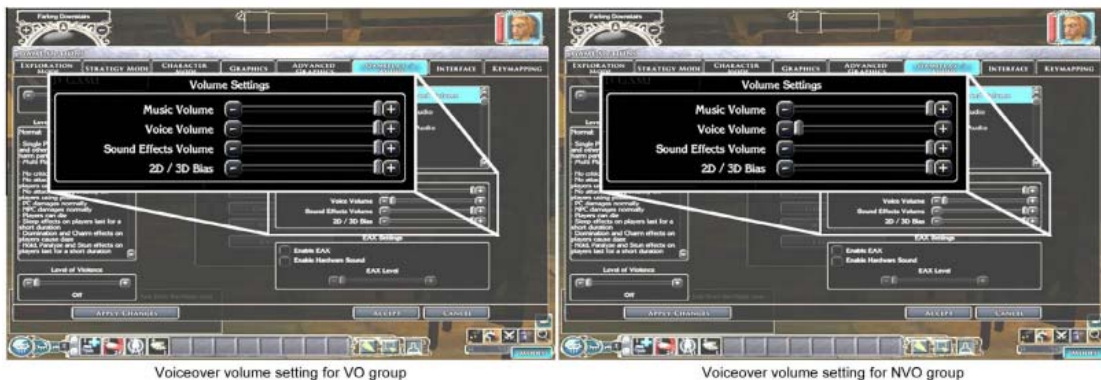
Fig. 2. Screenshot of the game mode, the inside of foster father's house. The character with the circle on the ground is the PC. All other characters are NPCs



Fig. 3. Screenshot of the Fairground area in the game environment.



Fig. 4. Sample screenshots of cinematic conversation.



Voiceover volume setting for VO group

Voiceover volume setting for NVO group

Fig. 5. Screenshot of the voice volume setting for VO and NVO group.