**Table 3: Commonly Occurring Approaches to Power Mobility Training in Descending Order of Evidence Level and Descending Order of Methodical Rigor within Each Level of Evidence**

|  |  |  |
| --- | --- | --- |
| **Approach** | **Definition of the Approach** | **Studies Utilizing the Approach** |
| **Incorporating Play** | Intentional use of play to engage the child and provide opportunities to use movement in the power mobility device to support and enable the child’s play. | **Highest Level of EvidenceA - Level II:** Jones et al. 2012,29 Chen et al.,19 Marchal-Crespo et al.37 (RCT) |
| **Additional EvidenceA - Level IV:** Huang et al. 2014,25 Kenyon et al. 2015,30 Kenyon et al. 2016,31 Douglas & Ryan,20 Furumasu et al.,22 McGarry et al,38 Ragonesi et al. 2011,40 Ragonesi et al. 2012,41 Marchal-Crespo et al.37 (case report) |
| **Additional EvidenceB - Level V:** Logan et al. 2014,34 Logan et al. 201635 |
|  | | |
| **Virtual Reality and Computer-based Gaming** | Use of computer games or virtual reality to permit users to practice power mobility skills in a computer-generated environment or through use of a computer-based game. | **Highest Level of EvidenceA - Level II:** Linden et al.,33 Inman et al.27 |
| **Additional EvidenceA - Level III:** Huang et al. 201526 |
| **Additional EvidenceB- Level IV:** Montesano et al.39, Adelola et al.17, Harrison et al.24 |
|  | | |
| **Technology-augmented Power Mobility Devices** | Use of specialized power mobility devices equipped with specialized sensors or guidance systems to lessen the demands of power mobility use. | **Highest Level of EvidenceA - Level II:** Chen et al.,19 Marchal-Crespo et al.37 (RCT) |
| **Additional EvidenceA - Level IV:** McGarry et al.,18 Marchal-Crespo et al.37 (case report), Zeng et al.42 |
|  | | |
| **Natural Environments** | Providing opportunities for children to functionally use power mobility in locations in which the child would typically be spending time in during the day: home, school, daycare, community outings, etc. | **Highest Level of EvidenceA - Level II:** Jones et al. 201229 |
| **Additional EvidenceA - Level IV:** Jones et al. 2003,28 Dunaway et al.,21 Huang et al. 2014,25 Butler et al.,18 Ragonesi et al. 2011,40 Ragonsei et al. 2012,41 Galloway et al.,23 Larin et al.32 |
| **Additional EvidenceB - Level V:** Logan et al. 201434 |
|  | | |
| **Goal-directed Mobility** | Placement of a toy, object, or person to engage the child to use power mobility movement in a meaningful and purposeful manner. | **Highest Level of EvidenceA - Level IV:** Huang et al. 2014,25 Lynch et al.,36 Kenyon et al. 2015,30 Kenyon et al. 2016,31 Ragonesi et al. 2011,40 Ragonesi et al. 2012,41 Larin et al.32 |
| **Additional EvidenceB - Level V:** Logan et al. 2014,34 Logan et al. 201635 |
|  | | |
| **Self- exploration** | Intentionally allowing the child to use the power mobility device to explore his/her environment | **Highest Level of EvidenceA - Level IV:** Lynch et al.,36 Kenyon et al. 2015,30 Douglas & Ryan,20 Ragonesi et al. 2012,41 Larin et al.32 |
| **Additional EvidenceB - Level V:** Logan et al. 2014,34 Logan et al. 201635 |
|  | | |
| **Skills-based Programs** | Training focused on practicing specific power WC skills through a formal program. | **Highest Level of EvidenceA - Level IV:** Dunaway et al.,21 Furumasu et al.22 |

RCT: randomized controlled trial

A Level of evidenced determined using the Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence13

B Level of evidence determined using the Levels of Evidence for Single-Subject Research Designs14