Developing Effective Online Training Tools for Maine Adaptive Sports and Recreation

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Background

- Maine Adaptive Sports & Recreation (MASR) is an adaptive sporting program that relies on volunteers to instruct participants of varying abilities.
- In order to effectively instruct, volunteers should firmly understand the health condition their participant has.
- Previously, MASR lacked a formal curriculum to educate their volunteers.

Aims

To create online learning modules & determine whether a massed or distributed learning schedule resulted in better long term retention and confidence.

Methods

- MASR volunteers were placed into two non randomized groups of eleven.
- Six video training modules were created to educate volunteers on the most common conditions encountered.
- Group A watched all of their modules at one time while Group B followed a distributed schedule.
- Competence was assessed prior, immediately after, and 2 weeks after completion of the learning modules.
- Confidence regarding the subject matter was also assessed after 2 weeks.

Results

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>Median Age (Years)</th>
<th>Gender (M:F)</th>
<th>Previous Medical Experience</th>
<th>Previous Disability Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A (n = 10)</td>
<td>35.2</td>
<td>8:3</td>
<td>50% were current UNE medical students</td>
<td>2 with no experience, 9 with some experience</td>
</tr>
<tr>
<td>Group B (n = 11)</td>
<td>41.5</td>
<td>3:8</td>
<td>Most did not have medical experience</td>
<td>5 with no experience, 6 with some experience</td>
</tr>
</tbody>
</table>

- The groups differed in their pattern of test scores [F(2,38) = 7.0; p < 0.05]
- Each group had a significant improvement in competence at immediate recall and long-term retention compared to baseline. Improved competency was sustained only with massed learning.
- Between groups, there was a significant difference in pre-test competency, but not for immediate recall or long-term retention.
- Group B had a greater improvement in scores between pre-test and long-term retention compared to Group A [t(19) = -2.6; p = 0.036]
- Both groups felt more confident in their ability to work with participants with disabilities following completion of the learning modules, with no significant difference between groups.

Discussion

- Both groups displayed meaningful improvements in immediate recall, long term retention, and confidence.

Limitations:

- Different group demographics.
- Confusion about demographic survey.
- Small sample size.
- The participants’ knowledge of testing.

This study suggests that the learning modules were effective in educating new volunteers about MASR’s participants’ health conditions.
- However, there appears to be a practical advantage to implementing a distributed learning schedule.

Conclusion

- Our results support our initial hypothesis stating that modules can improve long term retention.
- Our data can help to shape and improve future MASR volunteer training.
- Great potential for future research.

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