Universal Design for Instruction as a Catalyst for Transforming Nursing Education

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**Problem**
- The Institute of Medicine (IOM, 2010), American Association of Colleges of Nursing (AACN, 2008), and National League for Nursing (NLN, 2016) have called on nursing education to transform its paradigm to embrace inclusive learning for all learners.
- Over the past 12 years, Universal Design for Instruction (UDI) principles have been developed and applied to postsecondary education for accessible learning environments; however, UDI principles have been slow to diffuse into nursing education.
- The possibility of faculty unknowingly excluding students from accessing a learning environment heightens the need for implementation of UDI principles in teaching practices.

**Purpose**
- The purpose of the literature review was to ascertain the current state of UDI in nursing education.
- The aim was to assess specific use of UDI in educational environments (e.g., classroom, online, clinical, simulation and skills labs).

**UDI Defined**
- UDI is a proactive teaching approach focused on instructional design and teaching strategies that benefit the broadest range of learners both with and without disabilities.
- UDI is not a form of accommodation. Faculty adoption of UDI teaching practices is by choice, not mandate.
- The UDI principles are more than technological access to course content; they are an accessible pedagogical approach for student learning environments.

**UDI Principles**
- Universal Design for Instruction (Scott, McGuire, & Shaw, 2001):
  - Equitable use
  - Flexibility in use
  - Simple and intuitive use
  - Perceptible information
  - Tolerance for error
  - Low physical effort
  - Size and space for approach
  - Use a community of learners
  - Instructional climate

**Search Strategies**
- Literature from 2000 to 2015
  - A combination of key terms included:
    - Universal design
    - Universal design for learning
    - Universal design for instruction
    - Universal instructional design
    - Nursing education
    - Postsecondary, college, university, or higher education.
    - Boolean operators of "scholarly journals," "OR," and "language" in English resulted in 151 articles.
    - Duplicates were removed and 45 articles were rated against the inclusion/exclusion criteria.

**Inclusion and Exclusion Criteria**
- Inclusion criteria:
  - Quantitative, qualitative, and mixed-method research studies.
  - Major featured articles, literature or integrative reviews in scholarly journals defined aim, purpose, methodology, results, data analysis, and references.
  - UDI principles were identified in the title, key word, abstract or body of the article.
  - Adult learners in postsecondary, college, university or higher education; and within date parameters.
- Exclusion criteria:
  - Articles not meeting inclusion criteria.

**Literature**
- Literature advanced for the review (n = 12).

<table>
<thead>
<tr>
<th>Author</th>
<th>Perspective</th>
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<tbody>
<tr>
<td>Hennessey &amp; Koch (2007)</td>
<td>Rehabilitation Counseling</td>
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<tr>
<td>Marcyniak &amp; Zorn (2011)</td>
<td>Nursing Education</td>
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<tr>
<td>McGuire &amp; Scott (2006)</td>
<td>Postsecondary Education and Disability</td>
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<td>McGuire, Scott, &amp; Shaw (2003)</td>
<td>Special Education</td>
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<td>Robert, Park, Brown, &amp; Cook (2011)</td>
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<td>Scott, McGuire, &amp; Foley (2003)</td>
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<td>McGuire (2011)</td>
<td>Higher Education</td>
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<td>Lombard, Murray, &amp; Gerdes (2011)</td>
<td>Diversity in Higher Education</td>
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**Findings**
- Marcyniak and Zorn (2011) authored the only article that highlighted the use of UDI principles in nursing education; however, it was limited to online learning.
- Most articles on the use of UDI were from outside the nursing education discipline (e.g., postsecondary education, education and disability, rehabilitation).
- A prevailing theme was nursing faculty and academic institutions had limited UDI awareness and orientation programs.
- The use of UDI in nursing educational settings mainly identified technology and equipment in the classroom and clinical setting (e.g., computers, software, and amplified stethoscopes).

**Implications to Nursing Education**
- The project is a "starting point" for diffusing UDI principles in nursing education.
- There is a significant gap in the nursing literature on UDI practices benefiting all students, including those without disabilities.
- Nursing faculty role development and UDI awareness regarding teaching effectiveness and successive inclusivity practices might improve student retention and learning.
- UDI principles provide a way to evaluate materials, content, assessments, instructional design, and teaching strategies for diverse learning needs.
- Further research is needed to measure nursing faculty members' willingness to adopt UDI principles in the classroom, online, clinical, skills and simulation labs.
- The need for professional in-services to diffuse awareness and knowledge of UDI teaching practices in nursing education is warranted.

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