Design principles for a preceptor-based experiential learning programme and preparing for the preceptor role

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STUDY AIM AND PRIMARY OBJECTIVE
Study Aim and Primary Objective

- Design research approach to:
  - Determine characteristics of an effective preceptor-based experiential learning programme in community pharmacy
  - Generate design principles
  - Preceptor important role model in programme delivery\textsuperscript{1-2}
INTRODUCTION TO DESIGN RESEARCH APPROACH
Introduction to Design Research Approach

- Relatively new research approach\(^3-4\)
- Appropriate when there are no well-defined guidelines\(^5\)
- Programme design based on:
  - Literature and similar available programmes\(^3,6\)
  - Involves “evolutionary prototyping”\(^7\) by a research team\(^7\)
    - Perpetual improvement of successive prototypes
    - Allows for programme optimisation
Introduction to Design Research Approach

- Cyclical character

Educational Problem → Analysis → Prototype design and development

Refinement needed? YES

Assessment → YES → Educational Problem

NO
Design Research Outputs

Theory advancement$^{3,9}$

Generation of characteristics and design principles$^{3,9}$
RESULTS
Design Research Outputs

Theory advancement

Generation of characteristics and design principles

Solving problem of no formal preceptor-based programmes

Effective programme and understanding preceptor motives
RESULTS

DESIGN PRINCIPLES FOR AN EFFECTIVE PRECEPTOR-BASED PROGRAMME IN A SOUTH AFRICAN CONTEXT
Overview of Presentation of Design Principles

- General Design
- Guiding Tools
- Guidance and Support
- Content
- Motivation and Commitment
Consult literature and alike programmes
- SAPC practice and education standards
- Faculty-practitioner interactions begin

Professional competencies to guide design
- Competency-based educational programmes encouraged internationally

Encourage practitioner and student participation
- Perpetual involvement
- May include an expert panel
- Student post-placement feedback
## Design Principles: General Guiding Tools

<table>
<thead>
<tr>
<th>Draw up formalised written agreements</th>
<th>• Memoranda of understanding</th>
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<tbody>
<tr>
<td>Ensure that experiential education office has enough staff</td>
<td>• Administration, planning, development, execution and refinement</td>
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<tr>
<td>Secure adequate number of placement sites</td>
<td>• Aim for reserve sites (12% - 20% excess)</td>
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<td>• Encourage students to seek sites in other regions</td>
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<td>Evaluate attained prototype</td>
<td>• Practicality and effectiveness</td>
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<td>• Actual outcomes = intended outcomes?</td>
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Design Principles: Content

Base student tasks on previously acquired theory

Create opportunities for multidisciplinary engagement

Strive for structure-autonomy balance

(Vygotsky and Kolb theories\textsuperscript{23-24})

Refer to Regulation 8 of the Pharmacy Act, 53 of 1974 – full scope of practice
Design Principles:
Guidance and Support

Student

Preceptor

Faculty
Preceptor Guidance and Support: Preparing for the Preceptor Role
Preparing the Preceptor

Preceptor Guidance and Support

- Contact preceptors in advance
- Training materials
- Criteria for excellence
- Practical education tips
Examples of Practical Education Tips

- Decide on learning approach on day one
- Apply a team approach to training
- Strategies to overcome time constraints
- Reserve quieter times for module tasks
- Initially, select “appropriate” patients
Preparing the Preceptor

Assessment training
Module objectives and expectations well-articulated
Step-wise student remediation plan
Student feedback
Design Principles: **Motivation and Commitment**

**Preceptor**

**Student**
Design Principles: Preceptor Motivation and Commitment

Values

- Give back
- Acknowledge importance of preceptor role
- Strong ethical responsibility

Understanding

- Revise and develop existing knowledge

Other Factors
Design Principles: **Preceptor Motivation and Commitment**

- **Guidance and Support**
- **Satisfaction**
- **Other factors**
- **Personal decision**
- **Free access to online resources**
- **Student recruitment opportunity**

**Student recruitment opportunity**
**Free access to online resources**
**Personal decision**
**Other factors**
**Guidance and Support**
**Satisfaction**
CONCLUDING REMARKS
Concluding Remarks

- Unique contributions to global pharmacy
  - Application of design research approach
  - Adaptation of Volunteer Functions Inventory (preceptor motives)
- New theory generated for the South African context
  - Experiential learning programmes
  - Preceptor and student motivation
- Thus, may provide guiding tools for other faculties
Thank you!

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References


References


