

# Occupational Therapy in Higher Education: A Case Report on Supporting a Student with Physical Disability

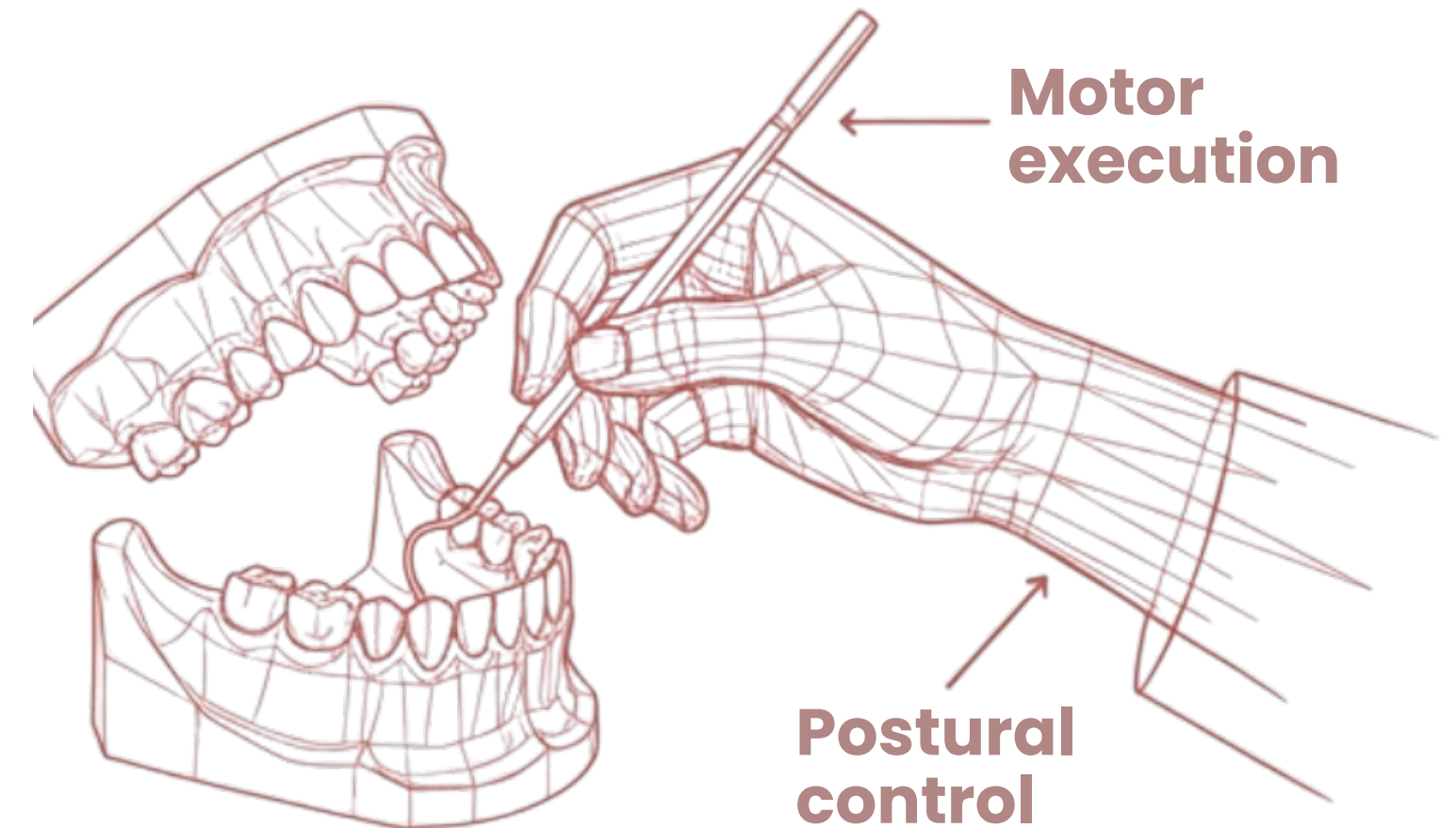
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**Disclosure:** No financial disclosures

# Background & Rationale

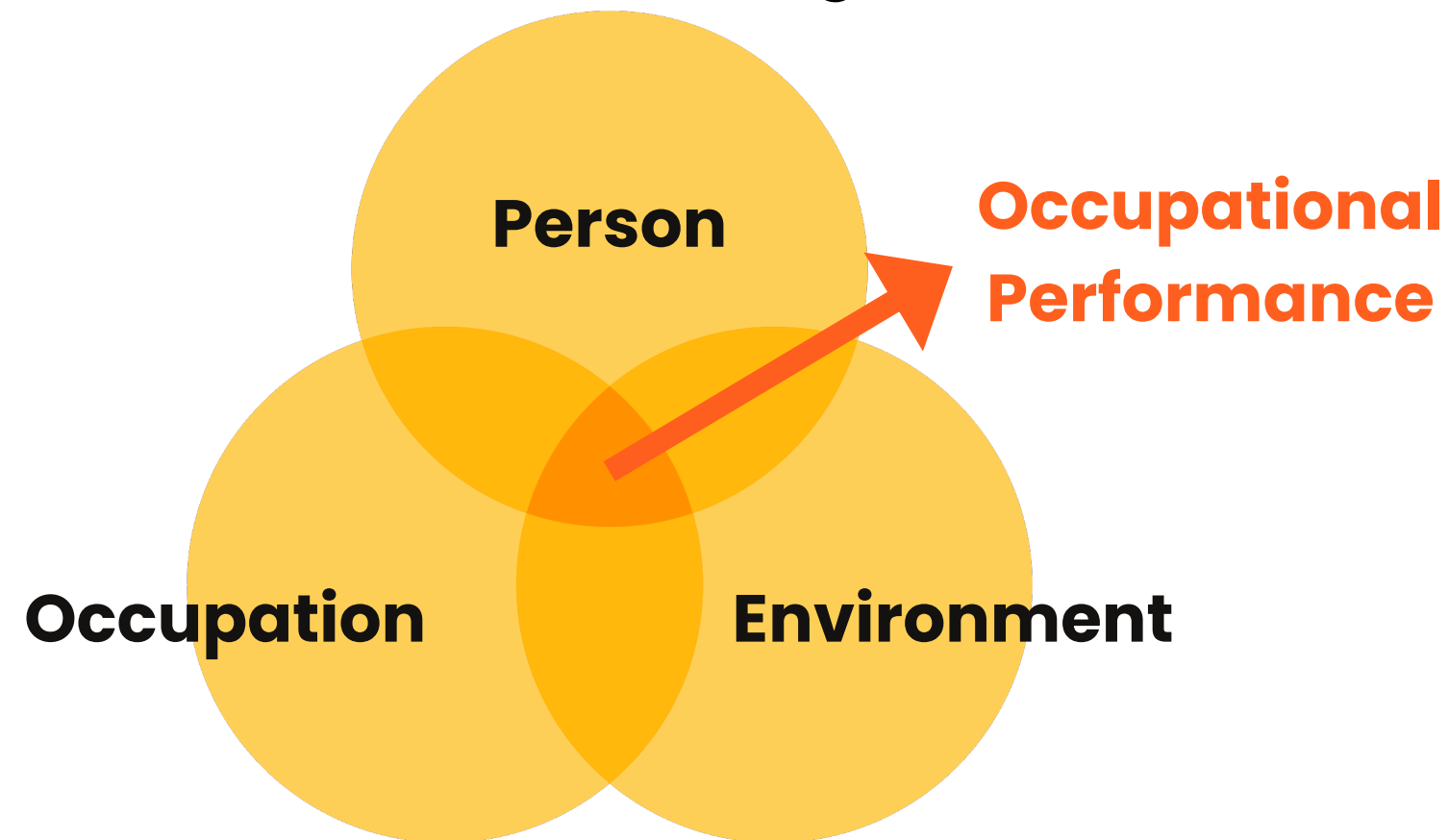
- Access and retention in higher education
- Significant challenges for individuals with disabilities
  - Health sciences programs → practical skills
- Students with physical disabilities:
  - Motor execution and postural control
  - Restric academic engagement
  - Continuity in their academic pathways
- OT: key role in identifying barriers and facilitators to participation:
  - Supporting inclusion
  - Maintaining safety and professional standards



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# Background & Rationale

- Structured occupational therapy intervention
  - Guided by the Person–Environment–Occupation Model
  - Developed at a public university
    - Accessibility and Inclusion Centre (NAI) → institucional service that supports students with disabilities in higher education

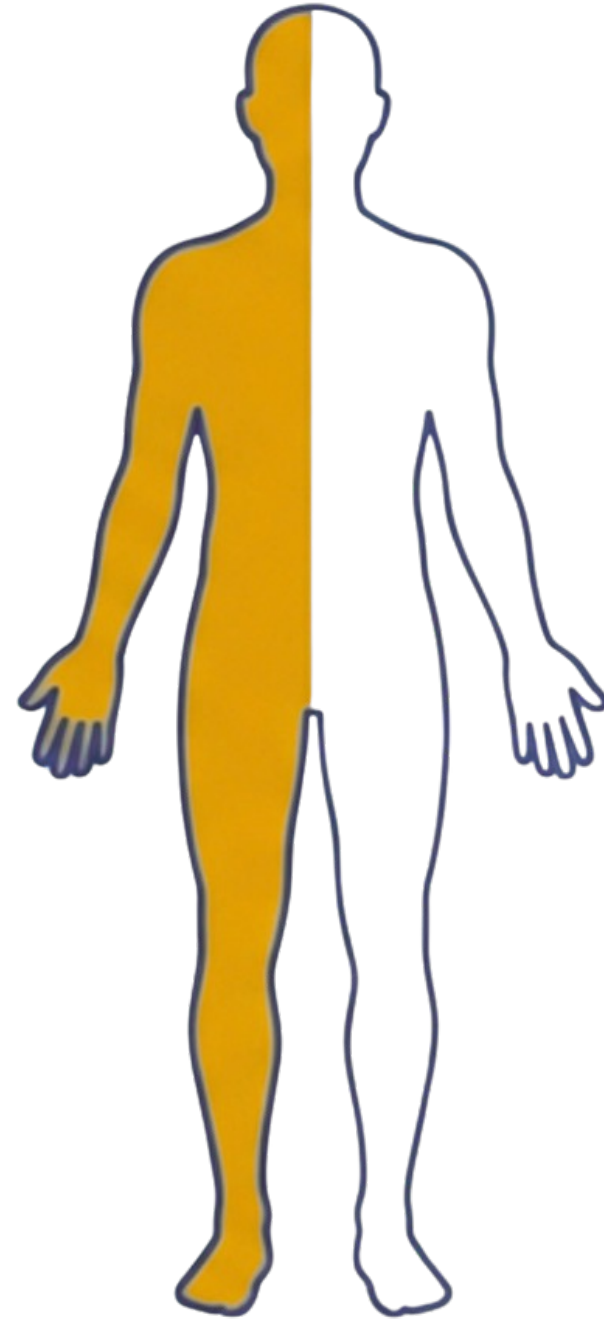


# Objective

To describe an occupational therapy intervention for a Brazilian university student with physical disability in a health sciences program, highlighting strategies to improve academic participation and practical course adaptation.



# Methods



**Subject:** Dentistry Student  
**Diagnosis:** Left Hemiparesis  
 (Post-Stroke)

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## OT process



### EVALUATION

- Occupational performance
  - Mapping academic routines
  - Analyzing practical and laboratory activities
  - Activity and occupational analysis
    - Identifying barriers and facilitators



### INTERVENTION

- Personalized strategies
  - Task adaptation
  - Motor and cognitive training
  - Assistive devices
  - Environmental modifications
  - Guidance for professors and peers



### OUTCOMES

- Reassessment → periodically
  - Adjustments based on progression and feedback

## Initial Evaluation



Fine Motor  
Coordination



Postural Instability &  
Fatigue



Bimanual performance

Central requirements in  
dental training

Prior to systematic OT follow-up:

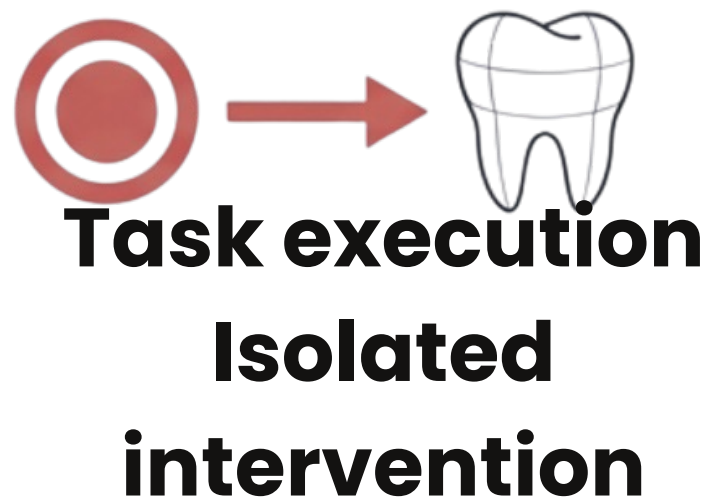
- History of repeated failures in basic-cycle disciplines
  - To manage many courses simultaneously

# Results

**Structured,  
multidisciplinary,  
occupational therapy-  
led intervention**



Organization of the  
academic pathway itself



# Results

## Structured, multidisciplinary, occupational therapy-led intervention

### Reorganization of academic pathway

- Advanced planning with course coordination
  - Reducing overload
  - Increasing predictability

### Psychological support

- Recommended by the OT team
- Pursued independently
- Contributed to improved:
  - Self-efficacy
  - Adjustment to disability

### Regular physical activity

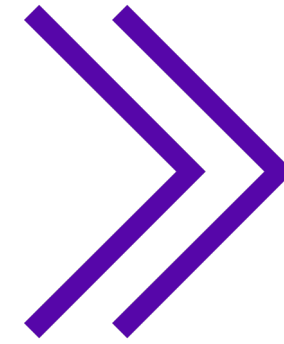
- Endurance
- Postural control
- Fatigue management

# Results

**Structured, multidisciplinary, occupational therapy-led intervention**

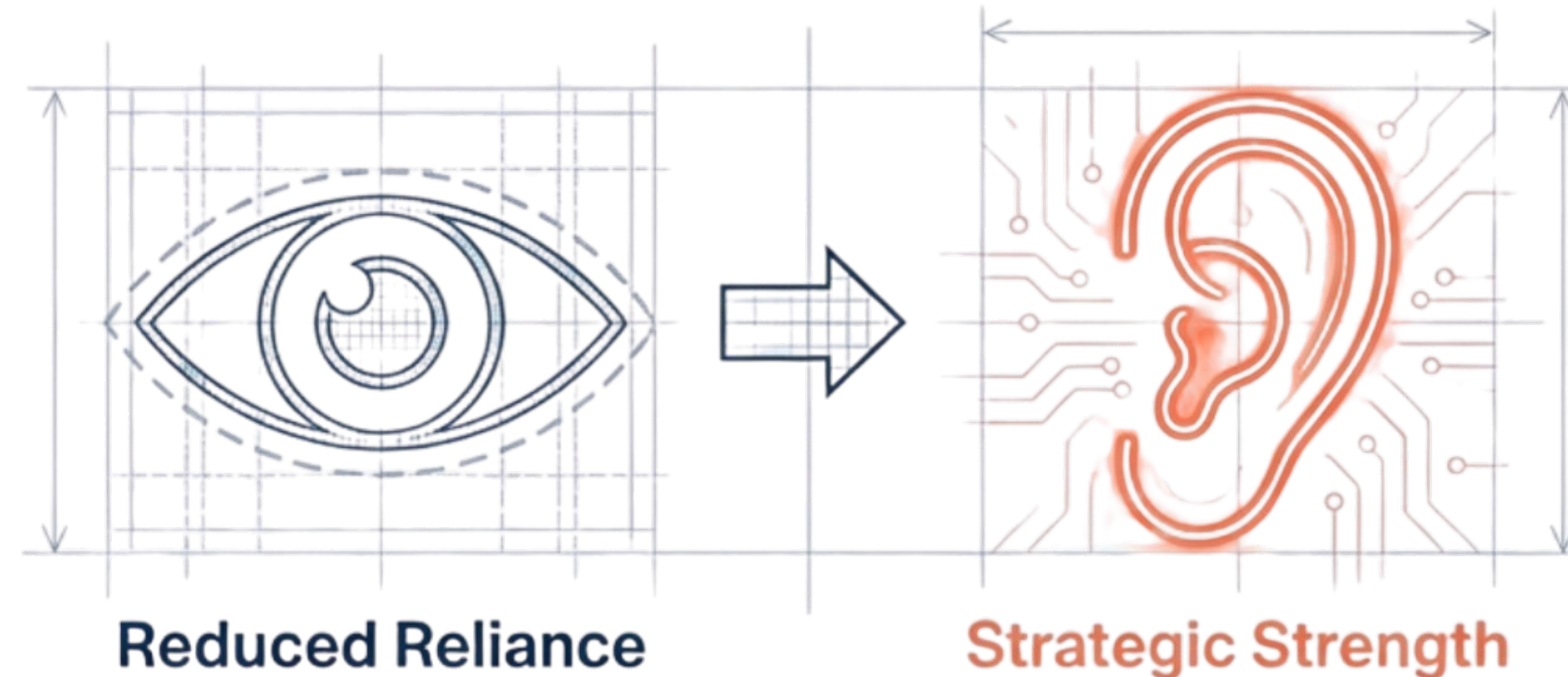
## Neuropsychological assessment

- Identified auditory processing as a relative strength



## Pedagogy team

- Reformulated study strategies
  - Emphasizing auditory input and verbal sequencing



## Structured, multidisciplinary, occupational therapy-led intervention

### Institutional collaboration

- Structured study partner program
- Trained senior students provided 10h/week of academic support
- Under OT guidance:
  - Study partner assisted with workspace organization, material sequencing, and rehearsal procedures using one-handed techniques
- Course coordination → to provide dental simulation phantom heads → to practice procedures safely before direct patient care

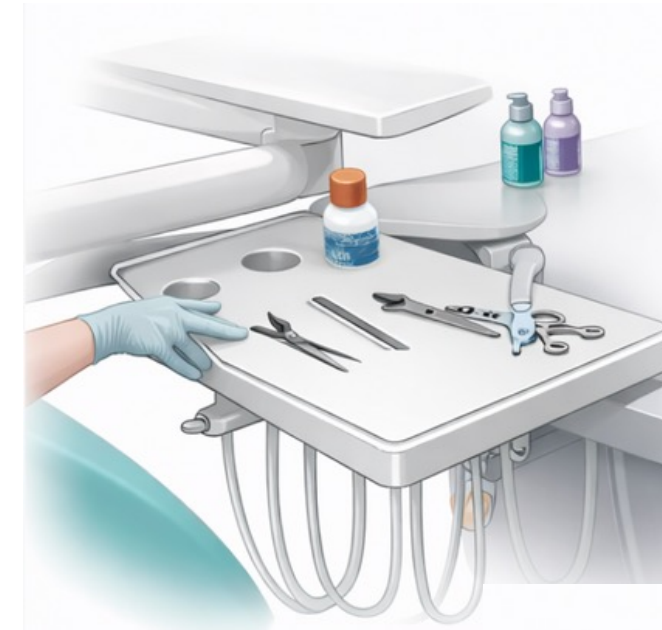


# Results

## Structured, multidisciplinary, occupational therapy-led intervention

### Assistive technology

- Under development by the university's engineering team
- Include:
  - an auxiliary table to reduce bimanual demands
  - a stabilizing support for dental mirrors and instruments
  - a customized ergonomic arm support



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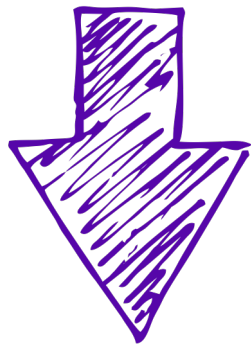


The student was actively involved in decision-making and developed greater awareness of his functional needs, recognizing the importance of preparation and gradual progression before clinical care.

# Conclusion

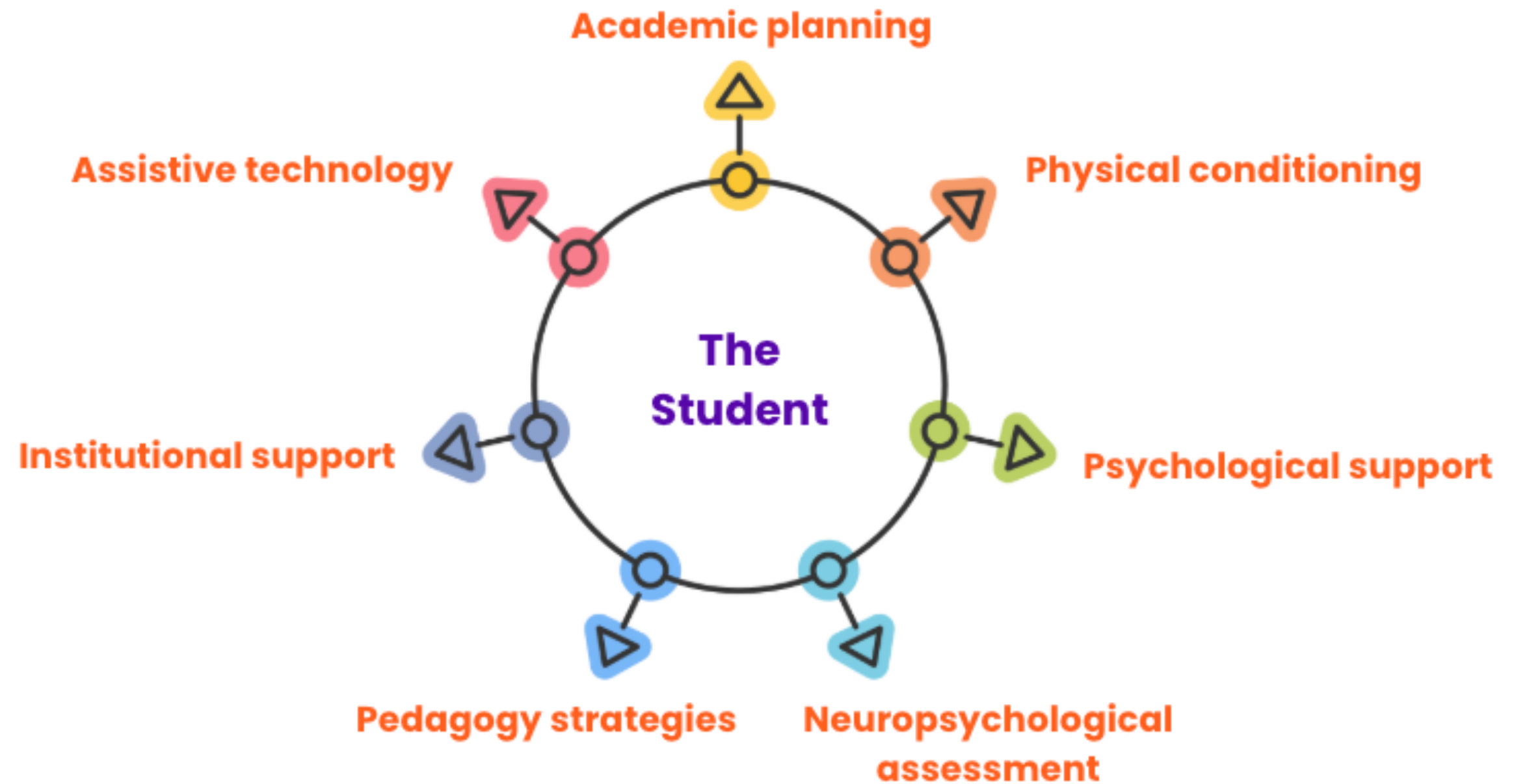
Positive academic outcomes:

- Successful completion of all undertaken disciplines and the basic cycle



They emerged from:

- Comprehensive functional assessment → the development of an occupational therapy-led intervention plan



# Significance to the Occupational Therapy Profession

This case highlights the essential role of occupational therapy in higher education by showing that equity-oriented, personalized interventions can reduce participation barriers while maintaining academic and professional standards

# References

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Guimarães, M. C. A., Borges, A. A. P., & Petten, A. M. V. N. V. (2021). Trajetórias de alunos com deficiência e as políticas de educação inclusiva: Da educação básica ao ensino superior. *Revista Brasileira de Educação Especial*, 27, e0059. [This case highlights the essential role of occupational therapy in higher education by showing that equity-oriented, personalized interventions can reduce participation barriers while maintaining academic and professional standards](#)

# Thank You!

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