Regional Initiatives in Dental Education (RIDE): Training Dental Hygiene and Dental Students Together

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Training the Dental Team

- Commonly, each member of the dental team is trained separately
- These professionals are put together in practice and must learn to work together
  - Limited knowledge about each other’s training, background, and knowledge
The RIDE Program: A Unique Experience

• 8 1st year dental students from University of Washington are trained along side baccalaureate dental hygiene students from Eastern Washington University
  – Introduction to Clinical Dentistry
  – Periodontology

• Hygiene faculty facilitate small group experiences with dental students
  – Clinic
  – Public health
INTRODUCTION TO CLINICAL DENTISTRY
Clinical Dentistry Lectures

• Dental (RIDE) students attend ½ lectures in Pre-Clinic with 1\textsuperscript{st} year hygiene students (other ½ podcasted)
  – Infection control procedures
  – Anatomical structures of the oral cavity
  – Intro to preventive (oral hygiene, fluorides, nutrition)
  – Patient assessment (health history, vitals, periodontal charting, dental charting, etc)
  – Professionalism and ethics in dentistry
  – Radiology
  – Dental assisting
Clinical Experiences

• Dental students work in partners in clinic with hygiene faculty facilitating experiences

• Communication project
  – Dental students paired up with a 3\textsuperscript{rd} year dental hygiene student who role plays a challenging client
  – Students discuss communication skills and strategies when dealing with difficult issues

• Observation/assisting experiences
  – RIDE students spend 2-3 sessions each quarter in the clinic observing/assisting 3\textsuperscript{rd} year students during dental hygiene therapy or restorative
### Clinical Survey

**1=strongly disagree 2=disagree 3=neither 4=agree 5=strongly agree**

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
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<tbody>
<tr>
<td>1  Shared learning will help me to think positively about other dental professionals</td>
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<tr>
<td>2  Clients would ultimately benefit if dental professionals would solve client problems together</td>
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<tr>
<td>3  Shared learning will increase my ability to understand clinical problems</td>
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<td>4  Shared learning will help me become a better dental team member</td>
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<td>5  For shared learning to work, students need to trust and respect each other</td>
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<td>6  Shared learning has helped me understand dentistry to a greater degree</td>
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Student Outcomes Of Interprofessional Learning: Clinical Survey Results 2010 (N=34)

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<tr>
<th>Question</th>
<th>Mean</th>
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<td>Q4</td>
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<td>1.104</td>
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Clinical Qualitative Thematic Data (N=34)

Advantages

• Respect (11)
  – Understanding profession
  – Build trust
• Teamwork (7)
  – More effective team
  – Work with others
  – Build foundation
• Learning from Each Other (4)
  – Shared knowledge
  – Different perspectives

Disadvantages

• Different levels of learning/knowledge (5)
• Not enough Interaction (3)
• Differences in opinions (2)
  – Can result in stereotype
• Lack of respect (2)
  – Lack of trust for one another
Excerpts From Dental Student Reflections of Clinical Assisting/Observation in 3rd year Dental Hygiene Clinic

• “This was a good experience...I was able to watch the hygienist and patient interact”
• “Learned a lot about debridement and calculus removal”
• “Enjoyed interacting with the patient and hygiene student”
• “Was able to gain an appreciation for dental hygiene therapy”
PERIODONTOLOGY
Periodontontology

• 1ˢᵗ year dental students join 2ⁿᵈ year dental hygiene students’ Periodontology class covering:
  – Periodontium in health
  – Epidemiology
  – Pathogenesis
  – Host Response
  – Oral-Systemic link
  – Periodontal Classifications
Periodontology “Work Groups”

• Groups assigned consisting of 1 dental student and 4-5 2nd yr hygiene students
• Each week after lecture, groups work on an activity related to subject for that day
• Each activity is built around:
  – Clinical (dental hygiene strength)
  – Histological/microbial (dental student strength)
• Work groups also take a team test together
## Periodontology Survey

1=strongly disagree 2=disagree 3=neither 4=agree 5=strongly agree

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Student Outcomes Of Interprofessional Learning: Results of Periodontology Survey

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* P values are not significant between years
Advantages

• Respect (16)
  – Understanding profession
• Learning from each other (13)
  – Sharing of information
  – Added knowledge
  – Point of view
• Teamwork (12)
  – Strengthen relationships/communication
• Enjoyable (10)
• Change (5)
  – New ideas/opinions

Disadvantages

• Different levels of learning/knowledge (12)
• Communication issues (3)
• Lack of respect (2)
• Interference in time/projects (2)
Perio 2010 Qualitative Thematic Data (N=34)

Advantages

• Respect (15)
  – Understanding profession
• Learning from each other (12)
  – Sharing of information
  – Added knowledge
  – Point of view
• Teamwork (12)
  – Strengthens relationships/communication
  – Learn to work together
• Enjoyable (5)

Disadvantages

• Different levels of learning/knowledge (15)
• Lack of respect (4)
• Time not used effectively (4)
• Attitude (2)
## Comparing Dental/Dental Hygiene Students: Combined Data

<table>
<thead>
<tr>
<th>Student</th>
<th>Perio 2009-2010 (p = 0.138)</th>
<th>Clinic 2010 (p = 0.183)</th>
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<tr>
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No significant different between groups
Dental Hygiene Faculty Perceptions: An Informal Survey
Faculty Challenges

• Scheduling between institutions/departments
• Faculty had to give up some autonomy of courses
• “It was not as easy as just putting them [dental students] in your existing class"
  – Different knowledge bases to begin the course
  – Different clinical experiences
    • DH students begin treating patients 1st year
  – Uncertainty of what is being taught across curriculum
  – Ensuring material is relevant for both groups
  – Developing “fair” equivalent exams
• Technology needs
Faculty Perspectives: Benefits to Students

• Interactions in classrooms, clinics, and labs simulate team experiences in post-educational settings

• Becoming aware of the education/knowledge of their colleagues can lead to:
  – Greater mutual respect in practice
  – Increased dental team communication
  – Improved patient management

• This experience helps to close the gap
Advantages for Faculty

• Despite some initial hesitations, faculty have benefited in many ways
  – Inter-institutional relationships
  – Shared expertise
  – Professional growth/innovations
  – Self-assessment of courses
  – Improved curriculum
  – Economies that come from sharing resources
Faculty Lessons Learned

• Overcoming misconceptions/respect issues
• Increasing RIDE student’s participation in real time courses with hygiene students
• Adding more clinical experience and interaction
Conclusion

• Interprofessional education in the RIDE program has had a positive impact on faculty, dental hygiene students, and dental students.

• Faculty and students agree that shared learning (for dental & dental hygiene students) is a worthwhile endeavor.
Any Questions?