Enhancing Adaptability with Task-Based Learning
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Introduction
Three years ago, a Next Generation Learning Space was installed in the secondary school Science building at The Scots College. Through its design, it attempted to disrupt classical teaching pedagogies and encourage an activity-based learning (ABL) approach amongst teaching staff. My first teaching experiences in the NGLS were frustrating for me and my students; it was hard to adapt teaching and learning strategies to fit the space. As teachers trialed new pedagogies, some showed signs of greater student engagement. I was inspired to investigate further. Building on past experience, my action research project employed a task-based learning (TBL) intervention to help boys adapt to a NGLS.

The Research Question
How might task-based learning help Grade 9 boys adapt to a next generation learning space?

Research Context and Participants
The project was conducted at The Scots College, an independent boys’ school in Sydney’s Eastern Suburbs. It has a reformed Presbyterian heritage and draws on its Christian values to shape and inform practice in the school. The project was intended to disrupt classical teaching pedagogies and encourage an activity-based learning (ABL) approach amongst teaching staff. My first teaching experiences in the NGLS were frustrating for me and my students; it was hard to adapt teaching and learning strategies to fit the space. As teachers trialed new pedagogies, some showed signs of greater student engagement. I was inspired to investigate further. Building on past experience, my action research project employed a task-based learning (TBL) intervention to help boys adapt to a NGLS.

The Research Action
TBL was introduced as a teaching strategy to help students adapt to the NGLS. The expectation was, that by implementing a teaching technique to fit the space, students would respond positively and have more success in adapting to this exciting, unfamiliar, and new environment.

The boys received a digital content outline at the beginning of each week. Tasks allowed boys to participate in individual learning, small group learning, and large group lectures. Other examples of tasks included:

- Making videos
- Group presentations
- Sizzlepp (computer-based activities)
- Mini-lecture
- Whiteboard (chalk talk)
- Teacher experiment demonstration
- Practical tasks
- Group research tasks
- Individual research tasks

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Data Collection and Analysis
It was integral to the scope of this project to collect qualitative and quantitative data as both data types provide different, yet equally important, information. Quantitative data were collected through:

- Google Form questionnaires
- Qualitative data were collected through:
- Google Form questionnaires
- Photographs
- Exit tickets
- Focus groups

These data collection methods provided boys opportunities to describe their experience throughout the action. Data were coded and analysed. Particular points of interest focused on how boys demonstrated adaptability cognitively, behaviourally, and emotionally. (Martin, Nejad, Colmar & Liem, 2013).

Key Findings and Discussion
Data were grouped into four main categories, which also mapped well against the three adaptability domains.

- Positive feeling or good vibe (emotional adaptation)
- Spatial impact (cognitive adaptation)
- Increased engagement (cognitive adaptation)
- Independence (behavioural adaptation)

Much of the qualitative data highlighted the boys’ experiences of TBL in a NGLS:

- “It’s kind of a happier place… You get a better vibe from this classroom compared to others.”
- “In this area I notice you get a lot more independence which is really important.”

Were you successful in adapting to science class in Phynexland this term?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Percentage</td>
<td>83.3%</td>
<td>16.7%</td>
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Were you successful in changing the way you do things to work well in Phynexland?

<table>
<thead>
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<th></th>
<th>Not at all</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
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<td>16.0%</td>
<td>12.5%</td>
<td>50.0%</td>
<td>15.5%</td>
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</tbody>
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Conclusions
- Adaptation in the boys was enhanced through TBL.
- TBL is one effective strategy to help boys adapt to a NGLS. There may also be many other strategies that are also effective for boys specifically and for students who find it hard to adapt to.
- Teaching strategies that fit the space are most likely to have maximum impact on student learning and adaptability.
- Time and training is required for teachers to be effective in NGLS.
- A team approach to teaching was embedded in this project, but not directly measured. This may be an important aspect to investigate further.

Key Readings