fig. 10.15. Bird's eye view of First Floor

fig. 10.16. I-Beam steel structure tied to building and supports floors above

fig. 10.17. I-Beam steel structure tied to building with corrugated iron sheets to form western screening device

fig. 10.18. I-Beam steel structure tied to building with corrugated iron sheets to form western screening device

fig. 10.19. Circular windows create gathering places with social staircase to second floor

fig. 10.20. I-Beam column structure support floors above with social staircase to second floor

fig. 10.21. The space beneath the social staircase on the western side opens up with views to the cooking school below

fig. 10.22. The space beneath the social staircase on the eastern side connects to the ground floor reception area

fig. 10.23. Auditorium stage

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fig.10.25. Bird's eye view of Second Floor

fig.10.26. Glazed northern facade with horizontal aluminium extrusions fixed to the structural window frame system

fig.10.27. Glazed facade wraps around to western side with the corrugated western screening continuing on the western facade

fig.10.28. New circulation areas on the southern facade with protruding glass boxes

fig.10.29. Double volume lobby area continuing along the whole northern perimeter of the second floor

fig.10.30. Views from lobby and personnel room down to the socializing areas

fig.10.31. New circulation areas on the southern facade with steel staircase structure

fig.10.32. View into transparent sound-lobby area alongside the auditorium

fig.10.33. View from stage gallery to seating area of auditorium
fig. 10.35. Bird's eye view of Third Floor

fig. 10.36. Glazed northern facade with horizontal aluminium extrusions fixed to the structural window frame system

fig. 10.37. Glazed facade wraps around to western side with the corrugated western screening continuing on the western facade

fig. 10.38. Double volume lobby area with library above

fig. 10.39. View from library to lobby area below

fig. 10.40. The western side of the library opens up to the exterior with an open-air learning space provided outside

fig. 10.41. Library administration area located in-between the two new circulation areas on the southern facade

fig. 10.42. Steel staircase structure with protruding glass boxes on the southern facade

fig. 10.43. View towards auditorium stage from rear entrance

fig. 10.44. Library administration area located in-between the two new circulation areas on the southern facade
**fig. 10.45.** Bird’s eye view of Fourth Floor

**fig. 10.46.** Concrete edge of exterior recreation area

**fig. 10.47.** Concrete edge with covered seating provided

**fig. 10.48.** Full size exterior basketball court

**fig. 10.49.** Tuck Shop located within cafeteria area

**fig. 10.50.** Cafeteria area with viewports to main circulation shaft

**fig. 10.51.** New circulation areas protruding from the southern facade

**fig. 10.52.** New circulation areas ending on the fourth floor
fig.10.54. Bird’s eye view of Fifth Floor

fig.10.55. Bird’s eye view of Sixth Floor

fig.10.56. Structural steel mesh on eastern facade to allow for vertical gardening

fig.10.57. Water collection tanks to provide grey water for ablution facilities below

fig.10.58. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation

fig.10.59. Typical interior of classroom with viewports to main circulation shaft
fig.10.61. Bird’s eye view of Fifth Floor

fig.10.62. Bird’s eye view of Sixth Floor

fig.10.63. Structural steel mesh on eastern facade to allow for vertical gardening

fig.10.64. Water collection tanks to provide grey water for ablution facilities below

fig.10.65. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation

fig.10.66. Typical interior of classroom with viewports to main circulation shaft
fig.10.68. Bird’s eye view of Seventh Floor

fig.10.69. Bird’s eye view of Eighth Floor

fig.10.70. Structural steel allow for vertical gardening. The proposed double volume opening connects both open-air learning areas

fig.10.71. The proposed double volume opening connects both open-air learning areas

fig.10.72. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation

fig.10.73. Typical interior of classroom with viewports to main circulation shaft
fig.10.75. Bird's eye view of Seventh Floor

fig.10.76. Bird's eye view of Eighth Floor

fig.10.77. Structural steel allow for vertical gardening. The proposed double volume opening connects both open-air learning areas

fig.10.78. The proposed double volume opening connects both open-air learning areas

fig.10.79. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation

fig.10.80. Typical interior of classroom with viewports to main circulation shaft
fig.10.82. Bird’s eye view of Ninth Floor

fig.10.83. Bird’s eye view of Tenth Floor

fig.10.84. Structural steel allow for vertical gardening. The proposed double volume opening connects both open-air learning areas

fig.10.85. The proposed double volume opening connects both open-air learning areas

fig.10.86. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation

fig.10.87. Typical interior of classroom with viewports to main circulation shaft

fig.10.88. Typical interior of classroom with viewports to main circulation shaft
fig.10.89. Bird's eye view of Ninth Floor

fig.10.90. Bird's eye view of Tenth Floor

fig.10.91. Structural steel allow for vertical gardening. The proposed double volume opening connects both open-air learning areas

fig.10.92. The proposed double volume opening connects both open-air learning areas

fig.10.93. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation

fig.10.94. Typical interior of classroom with viewports to main circulation shaft
fig.10.96. Bird's eye view of Rooftop Floor

fig.10.97. Bird's eye view of Roof

fig.10.98. Solid walls with viewports to the urban context are topped with openable glazed facades

fig.10.99. Openable glazed facades allow for an abundance of natural lighting and ventilation. Water tanks store water collected from the roof.

fig.10.100. Work surfaces are placed on the perimeter with viewports to the urban context.

fig.10.101. Thermal Chimneys on the perimeter are provided with openings that will allow for hot air to escape by means of the stack effect.
Conclusive Summary
The Apollo Project investigated the adaptive re-use of the existing, 10-storey office type Apollo Building, located on the southeastern corner of Church and Du Toit Street, as a multi-functional, vertical primary school.

The project attempted to realize the full potential of the existing structure as an educational facility through a series of explorations. Finally key interventions were derived from these explorations to formulate a number of proposed interventions that would convert the structure into an adequate, multi-functional, primary educational facility.

The project was initiated by a recent event by which the recent occurrence where urban educational facilities make use of existing structures within the inner city of Pretoria to fulfill their accommodation needs. Most of these projects cannot be regarded as successful, as a general lack of infrastructure restricts the capacity of programs offered. There is thus a real need for adequate educational facilities within the city. Adaptive re-use interventions that make use of under-utilized or vacant building stock for educational purposes offer a real solution to the identified problem.

Open land within the inner city is becoming all the more difficult to find. The densification of the inner city does not generally allow for the traditional, vast open playground and horizontally orientated educational building layout that is commonly the norm in suburbs. A shift to the vertical aspect of educational facility planning is thus required to meet the proposed densification of the inner city.

A mapping exercise revealed that a cluster of educational facilities exists in the southeastern part of Pretoria’s inner city. An urban framework was developed that will enable all of these facilities that is located in close proximity of each other to share common resources and infrastructure. The result is proposed to be an urban education campus within the precinct.

The Apollo Project proposes that a combination of the three aspects discussed above can contribute to a potential solution that will address the problem identified. This proposed use of existing buildings as educational facilities might even trigger urban regeneration by acting as catalysts for new development. This project is thus an example of one such intervention that makes use of an adaptive re-use strategy to establish a vertically orientated primary education facility that is multi-functional in use and that is able to share its resources and infrastructure with surrounding institutions on a cross programming basis.