

fig.10.5. Bird's eye view of Ground Floor



fig.10.8. Church Street pedestrian space



fig.10.11. Reception Area with social staircase to First Floor



fig.10.9. Cnr. Church and Du Toit Street pedestrian space



fig.10.12. Visitor Waiting Area with viewport to main staircase

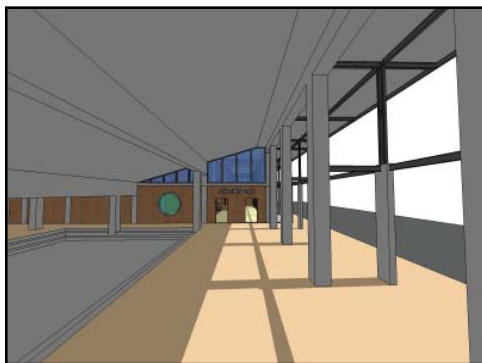


fig.10.6. Entrance to the Apollo Primary School

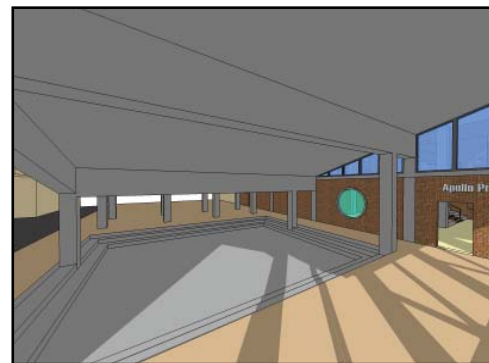


fig.10.7. Informal urban performance area



fig.10.10. Entrance to Basement from Du Toit Street



fig.10.13. Culinary School with circular windows to urban context



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



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



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



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



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



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



fig.10.23. Auditorium stage

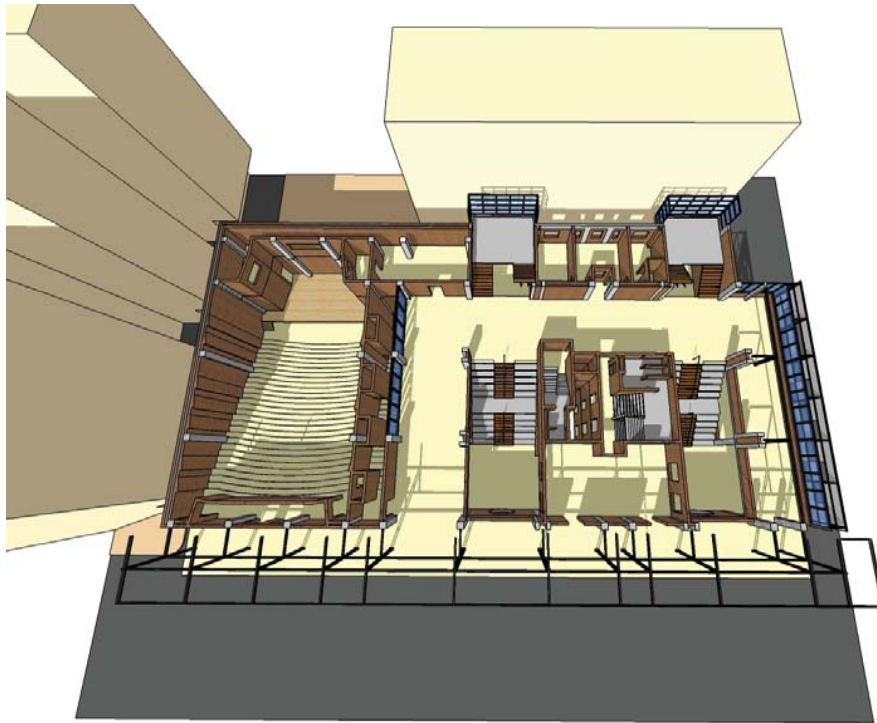


fig.10.25. Bird's eye view of Second Floor

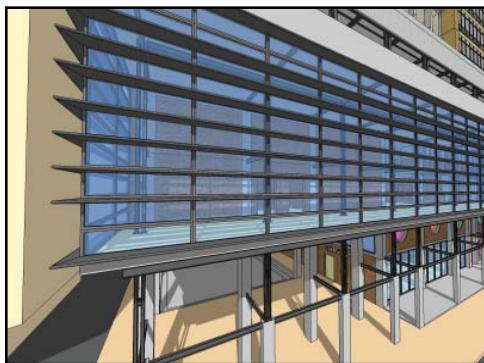


fig.10.26. Glazed northern facade with horizontal aluminium extrusions fixed to the structural window frame system



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

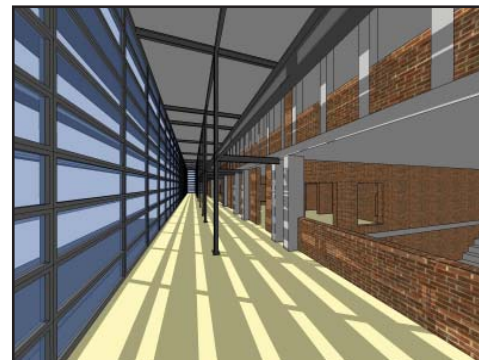


fig.10.29. Double volume lobby area continuing along the whole northern perimeter of the second floor

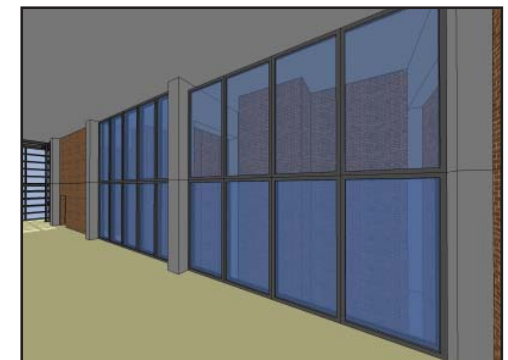


fig.10.32. View into transparent sound-lobby area alongside the auditorium



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

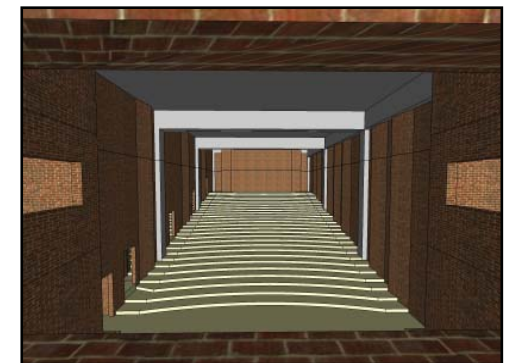


fig.10.33. View from stage gallery to seating area of auditorium

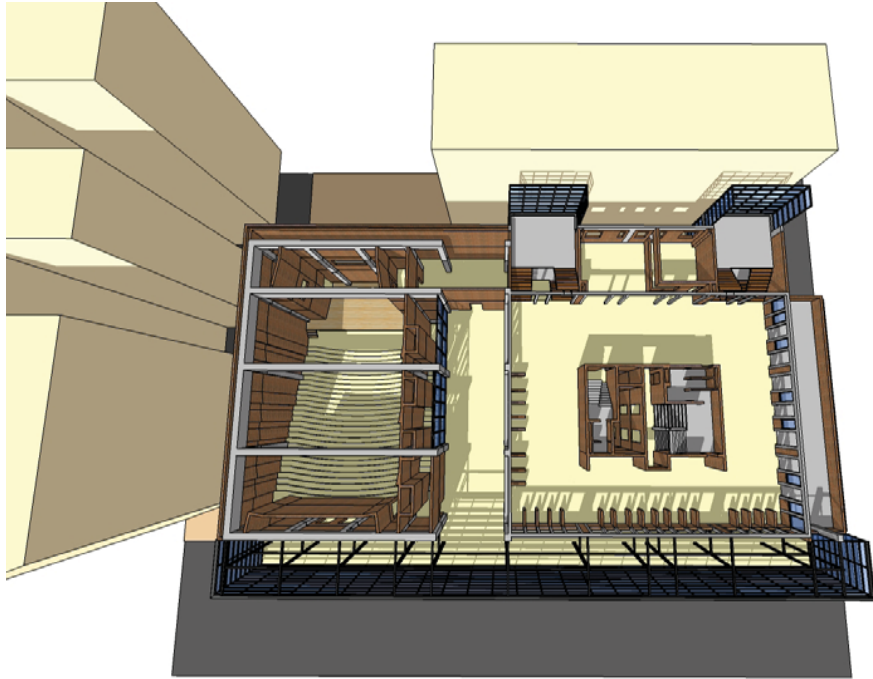


fig.10.35. Bird's eye view of Third Floor

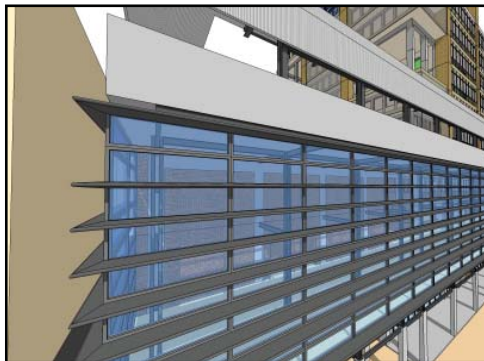


fig.10.36. Glazed northern facade with horizontal aluminium extrusions fixed to the structural window frame system

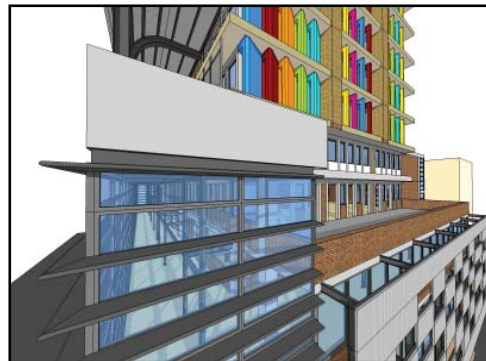


fig.10.37. Glazed facade wraps around to western side with the corrugated western screening continuing on the western facade



fig.10.38. Double volume lobby area with library above



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

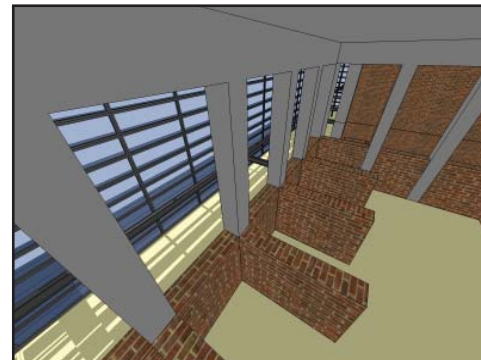


fig.10.39. View from library to lobby area below



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

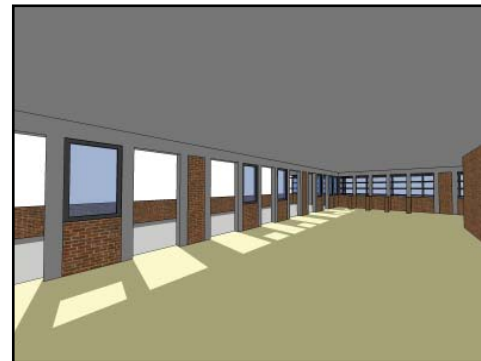


fig.10.40. The western side of the library opens up to the exterior with an open-air learning space provided outside



fig.10.43. View towards auditorium stage from rear entrance

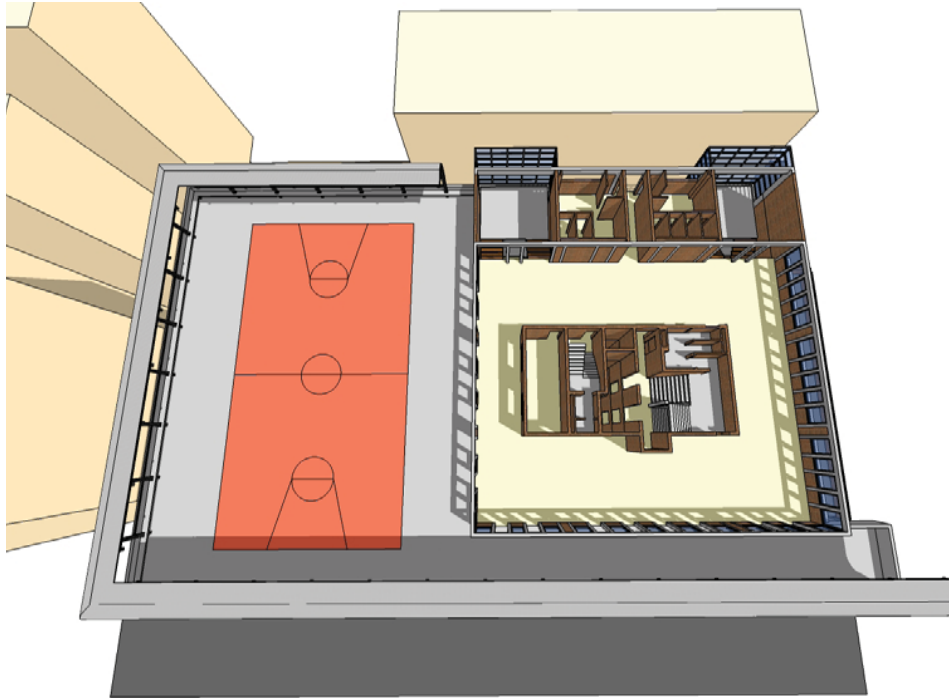


fig.10.45. Bird's eye view of Fourth Floor



fig.10.48. Full size exterior basketball court



fig.10.49. Tuck Shop located within cafeteria area

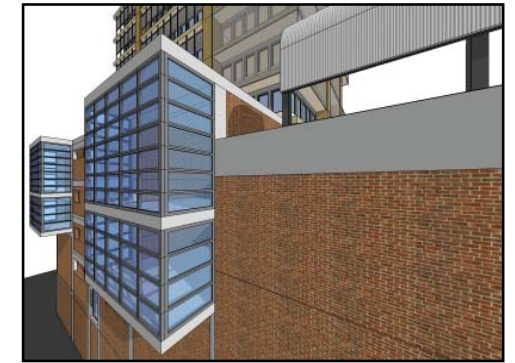


fig.10.51. New circulation areas protruding from the southern facade



fig.10.46. Concrete edge of exterior recreation area

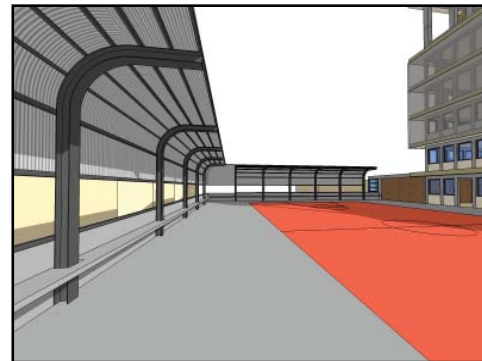


fig.10.47. Concrete edge with covered seating provided



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



fig.10.52. New circulation areas ending on the fourth floor

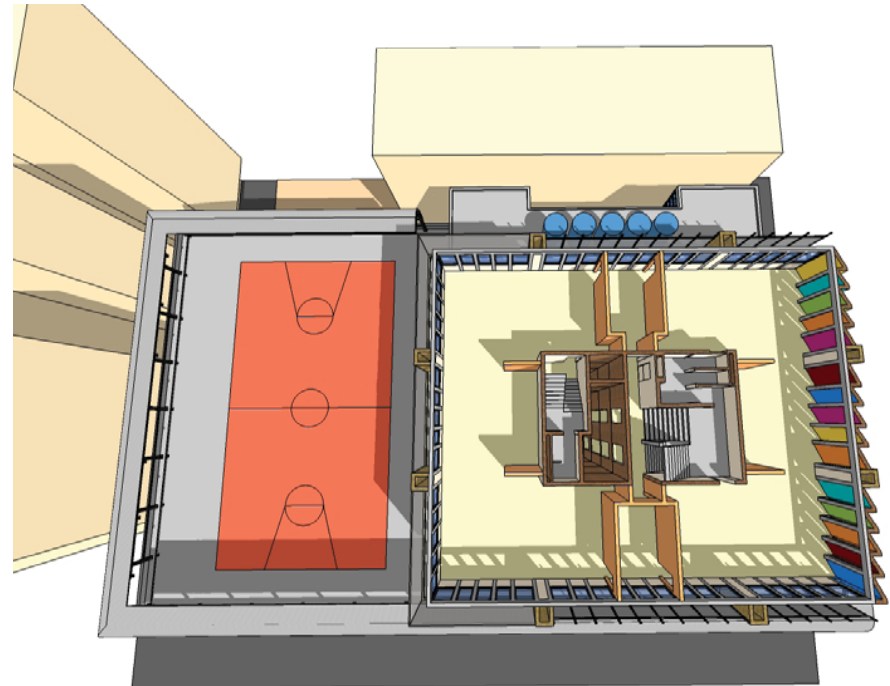
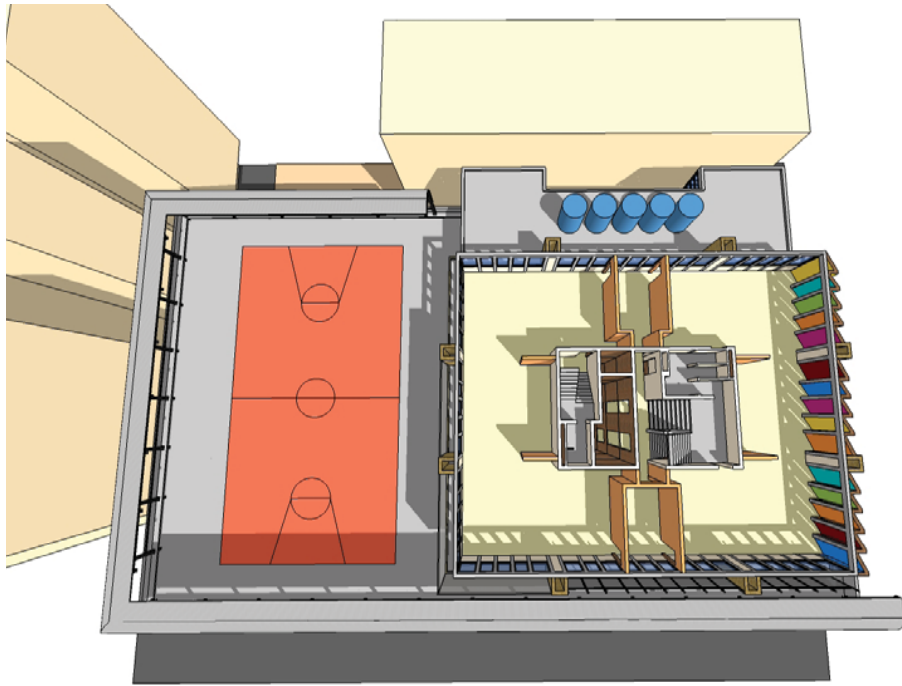


fig.10.54. Bird's eye view of Fifth Floor

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

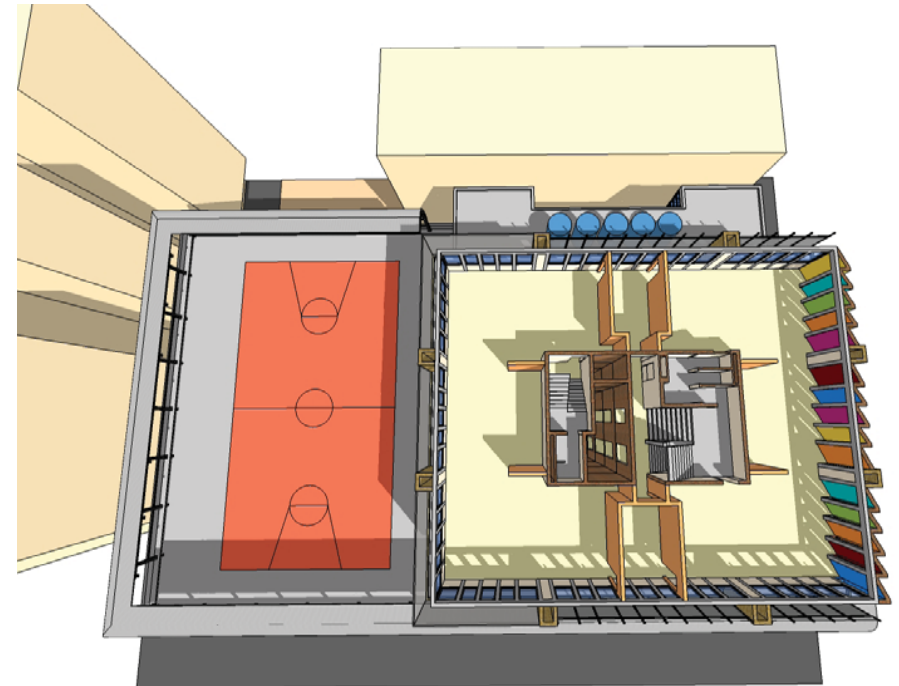
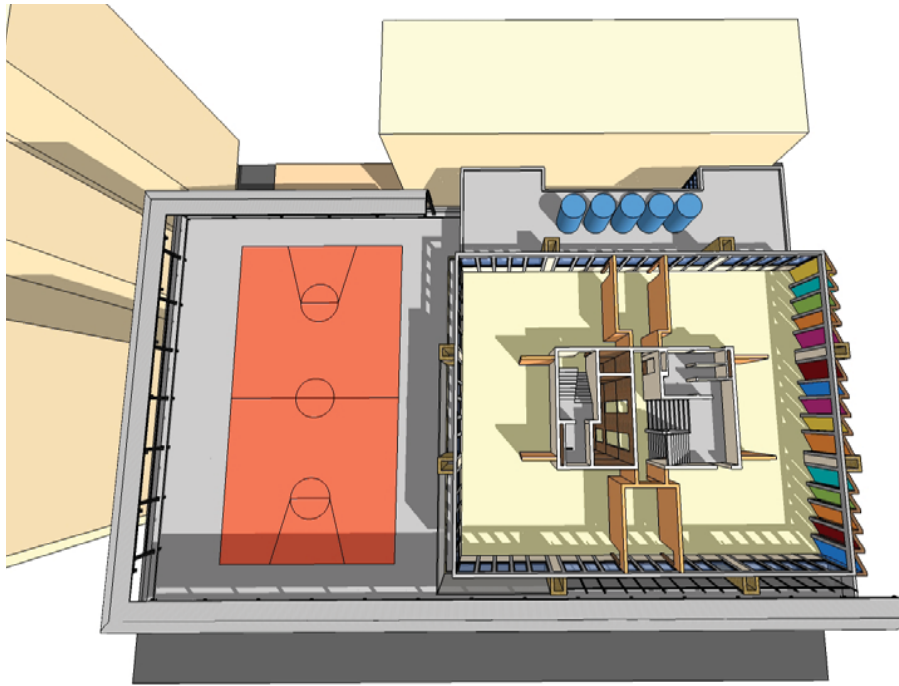


fig.10.61. Bird's eye view of Fifth Floor

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 ablation 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

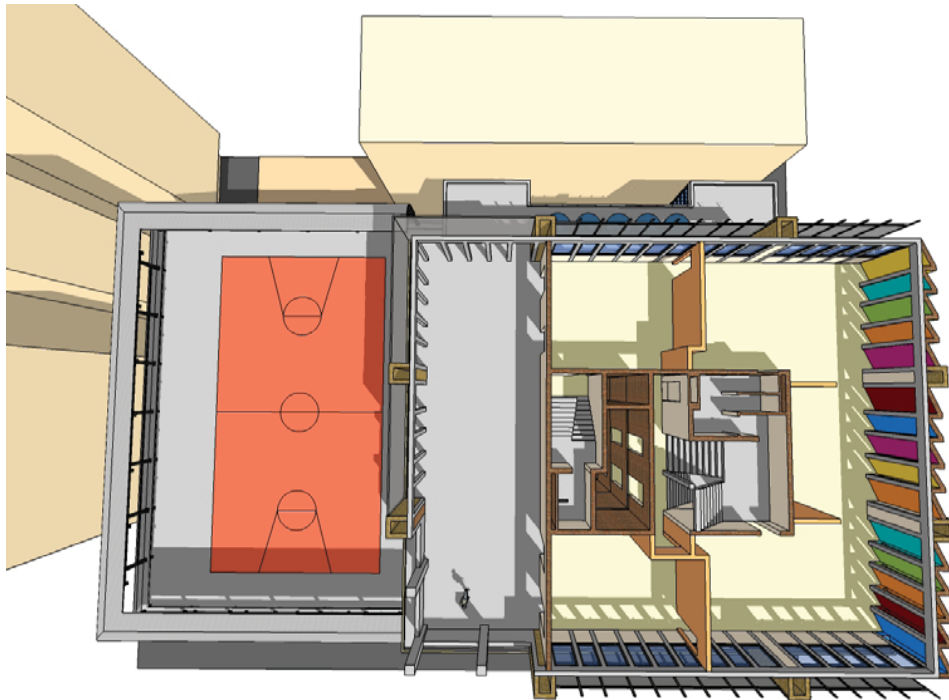


fig.10.68. Bird's eye view of Seventh Floor

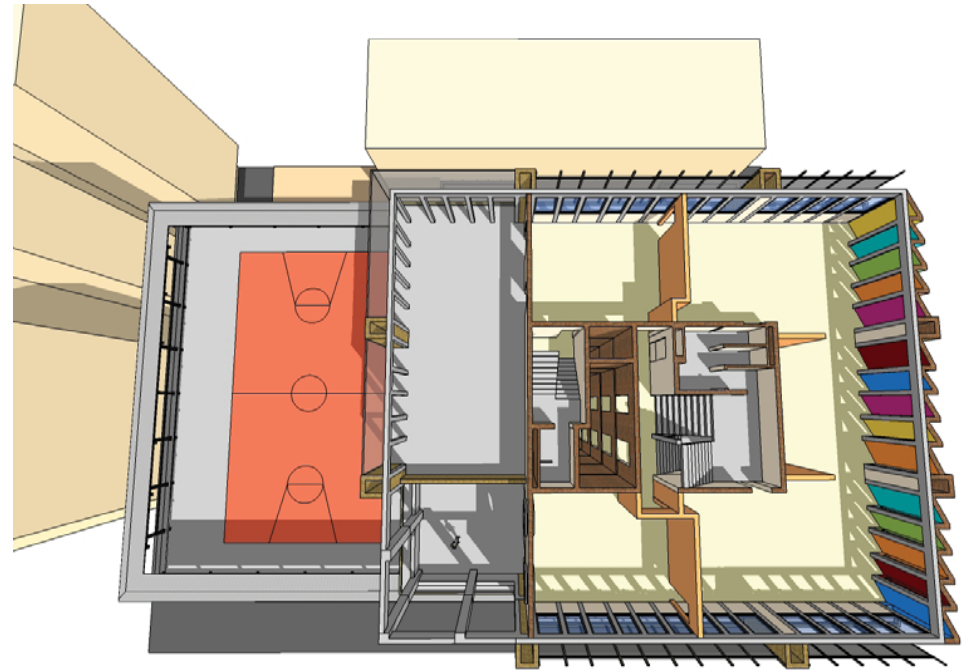


fig.10.69. Bird's eye view of Eighth Floor



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

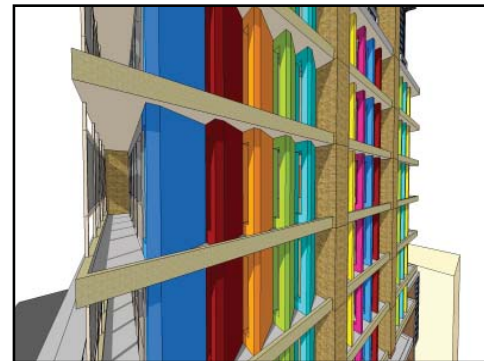


fig.10.72. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation



fig.10.73. Typical interior of classroom with viewports to main circulation shaft



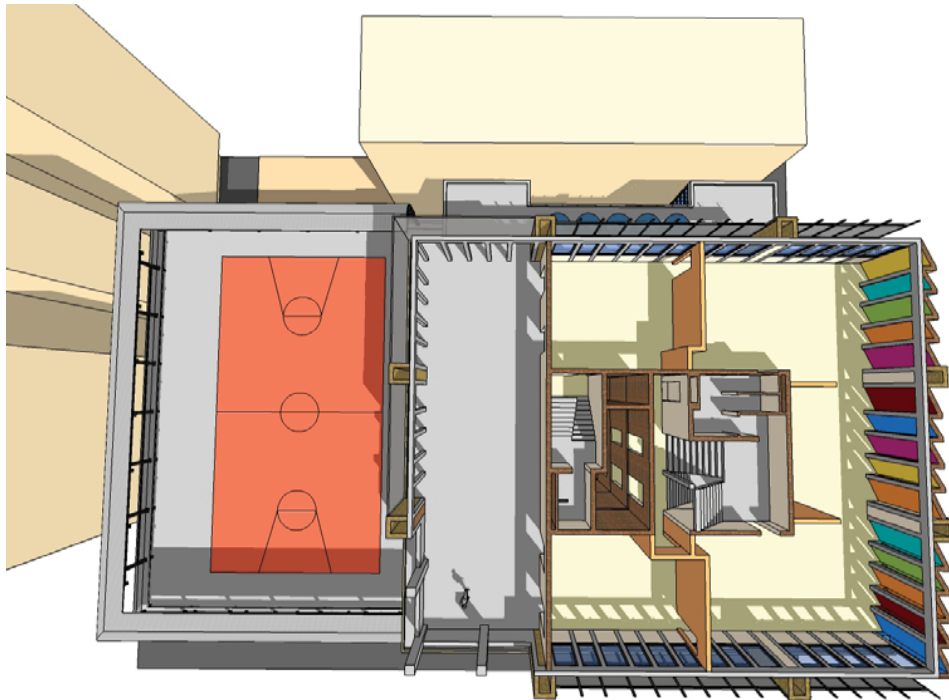


fig.10.75. Bird's eye view of Seventh Floor

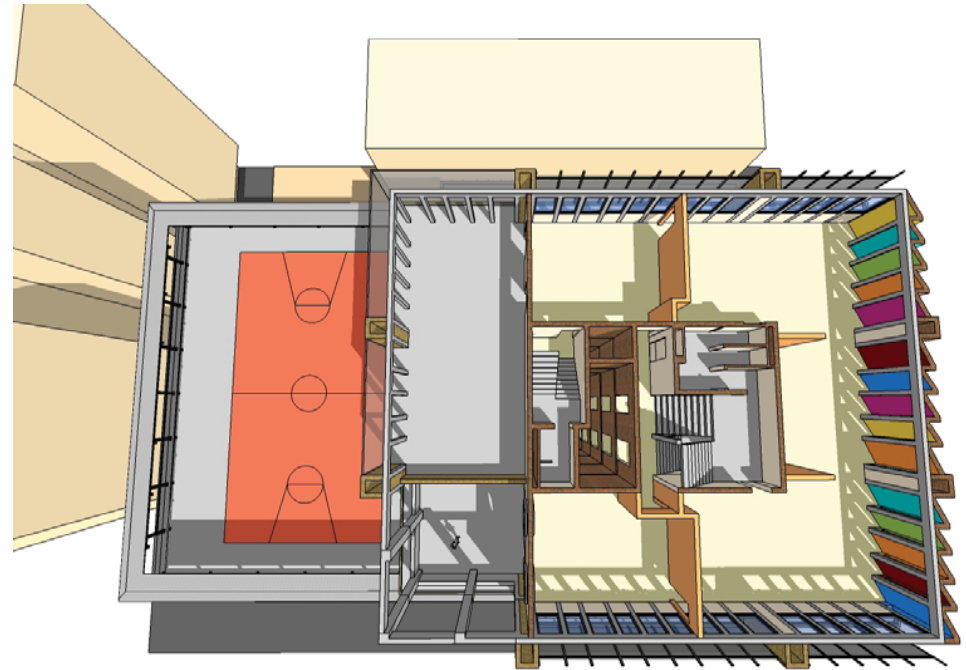


fig.10.76. Bird's eye view of Eighth Floor



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

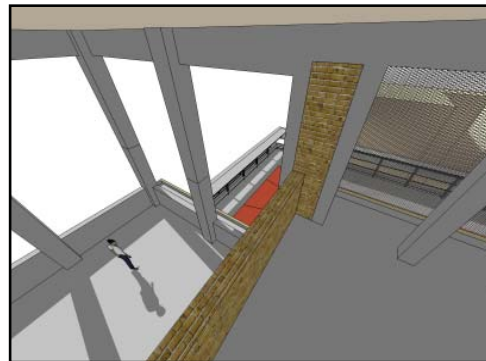


fig.10.78. The proposed double volume opening connects both open-air learning areas

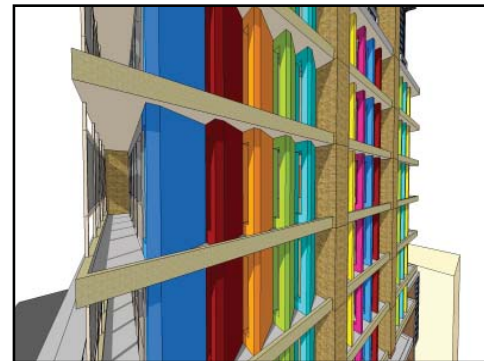


fig.10.79. Colorful angled walls to provide western screening. Northern screening provided by new glazed panels allowing for ventilation



fig.10.80. Typical interior of classroom with viewports to main circulation shaft

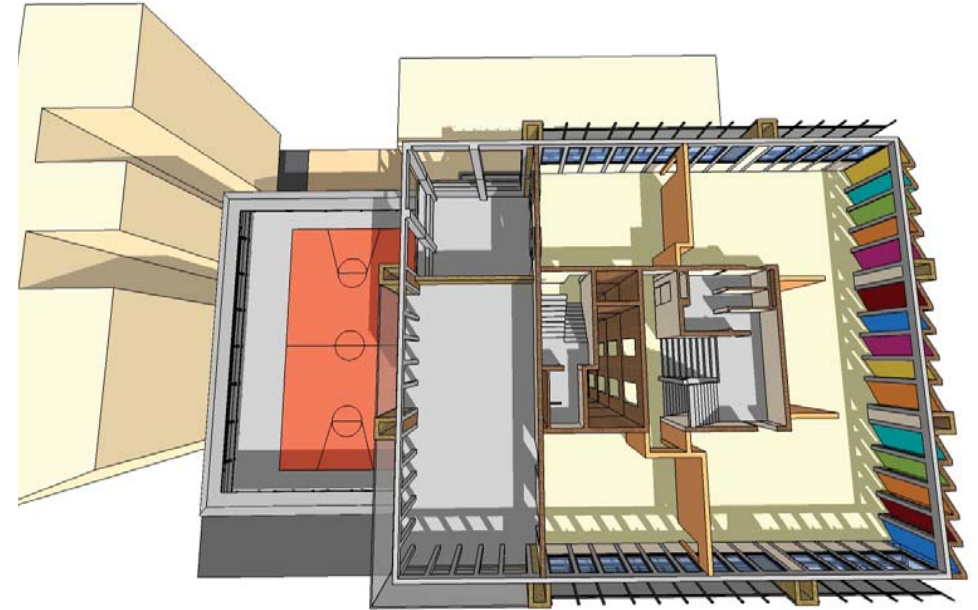
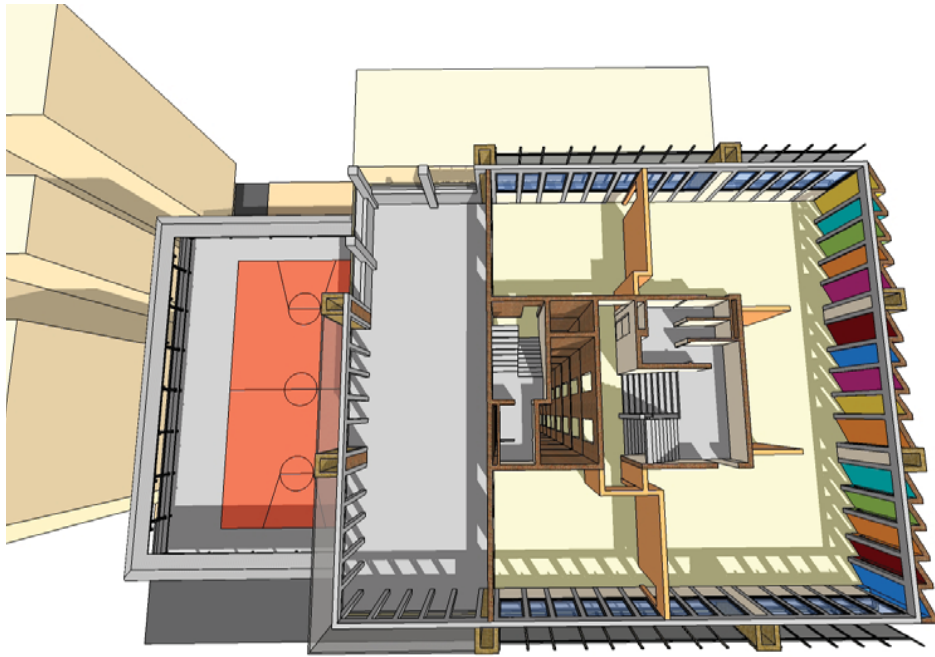


fig.10.82. Bird's eye view of Ninth Floor

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

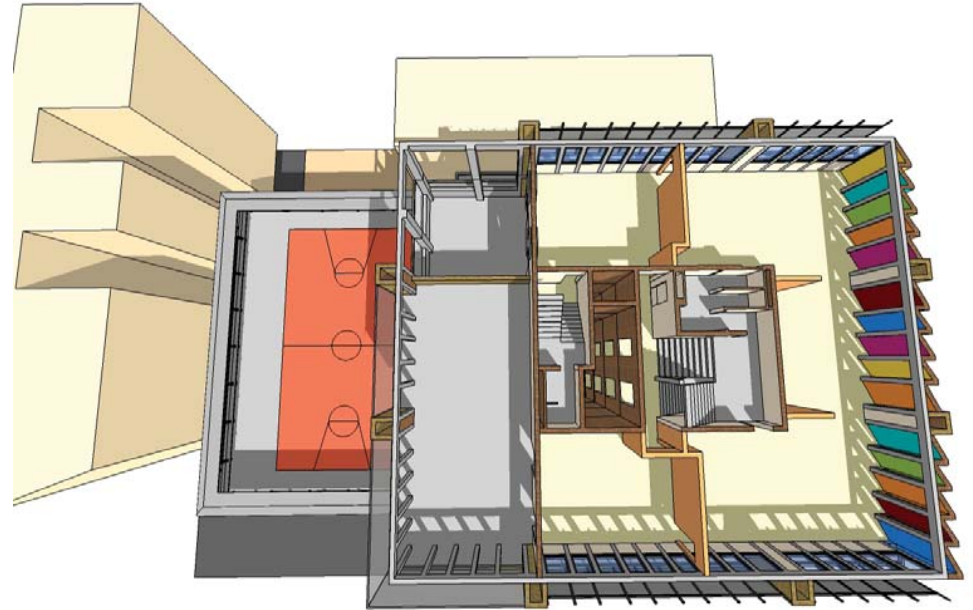
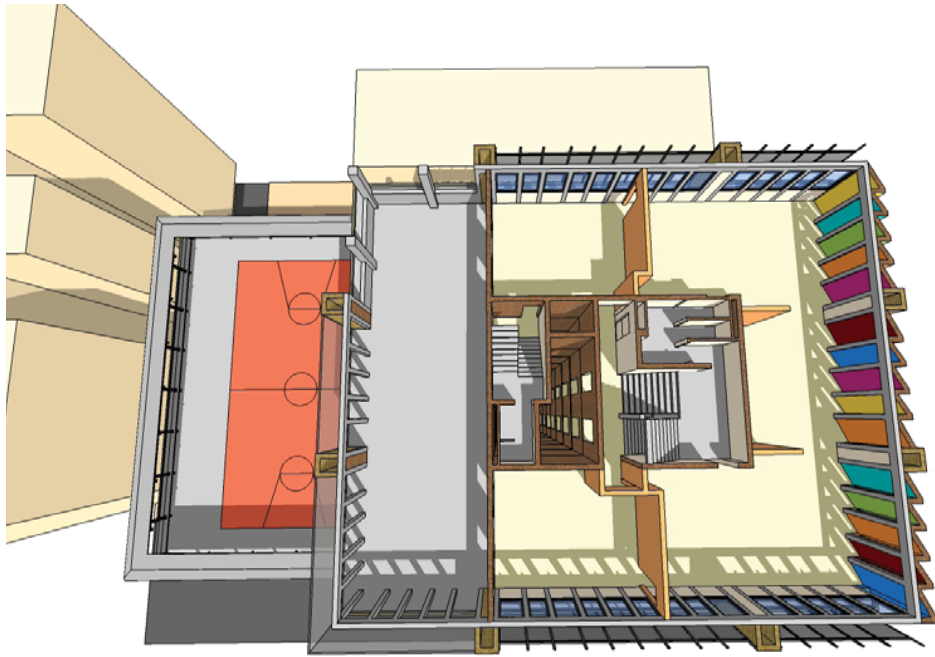


fig.10.89. Bird's eye view of Ninth Floor

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

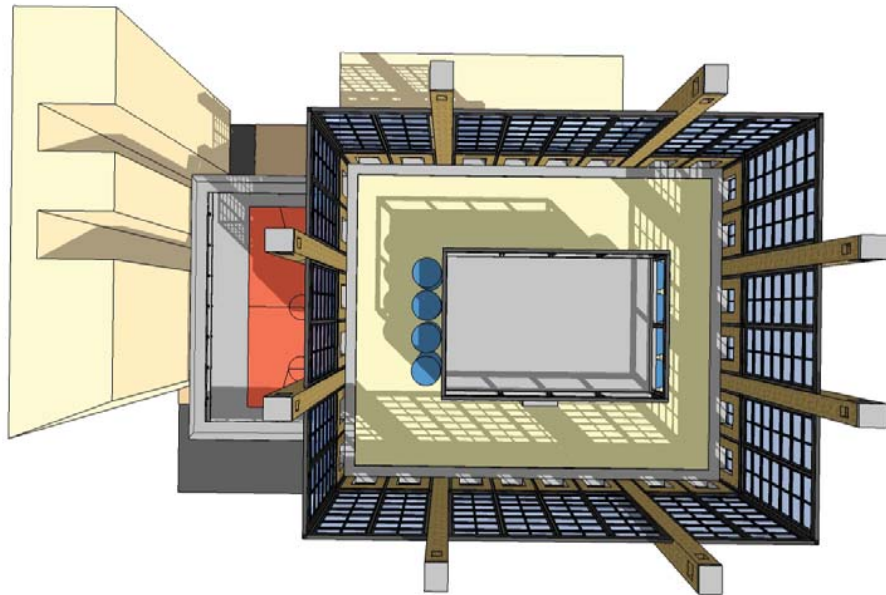


fig.10.96. Bird's eye view of Rooftop Floor

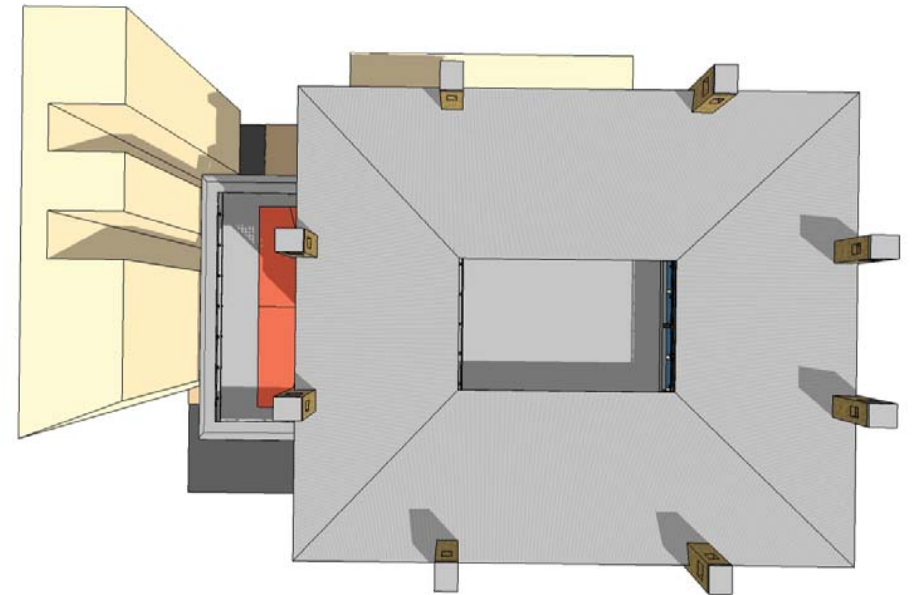


fig.10.97. Bird's eye view of Roof



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

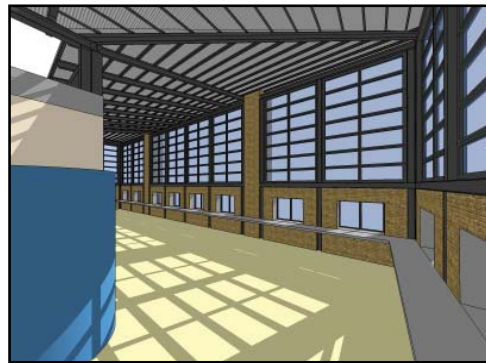


fig.10.99. Openable glazed facades allow for an abundance of natural lighting and ventilation. Water tanks store water collected from the roof



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

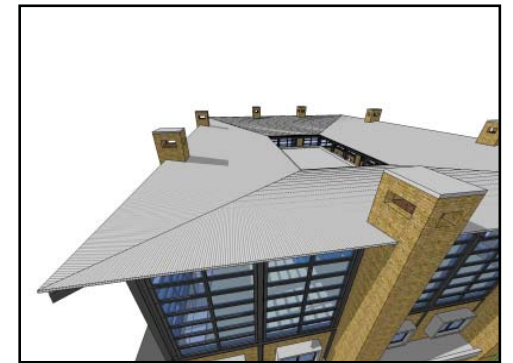


fig.10.101. Thermal Chimneys on the perimeter are provided with openings that will allow for hot air to escape by means of the stack effect





## 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.

# Conclusive Summary