

An aerial sketch of a city street. The drawing is done in a loose, artistic style with visible pencil or pen lines. It shows a street with several cars, trees lining the sidewalks, and buildings on either side. The colors are muted, with greys for buildings and roads, and greens for trees. The perspective is from directly above, looking down the street.

**"TO CHANGE LIFE WE MUST
FIRST CHANGE SPACE"**

- LEFEBVRE (1990)

EVALUATING LOCAL GREEN INFRASTRUCTURE TRAINING AND EDUCATION APPROACHES WITHIN URBAN PLANNING CURRICULA

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An aerial photograph of a city street, showing a row of green trees along the sidewalk, parked cars, and buildings. The image is partially obscured by the text on the right.

PROBLEM STATEMENT AND RESEARCH QUESTIONS

- Evolvement of GI led to a wide variety of definitions
- Misunderstanding of GI among practitioners due to its multidisciplinary nature
- What is GI?
- To what extent is GI currently included in tertiary urban planning education?
- How can future education initiatives be adopted to ensure integration of GI within spatial planning modules?

An aerial photograph of a city street, showing a mix of urban infrastructure and greenery. The street is lined with buildings and trees, and there are some green spaces in the middle of the street. The image is slightly blurred, giving it a sense of movement or a wide-angle shot.

CONTEXTUALISING GI

within planning

ALL NATURAL AND MAN-MADE ECOLOGICAL SYSTEMS, WHICH
INTEGRATE THE BUILT ENVIRONMENT AND ECOSYSTEM
SERVICES WITH RESILIENT LANDSCAPES SUPPORTING
ECOLOGICAL, ECONOMIC, AND HUMAN INTERESTS BY
MAINTAINING AND PROMOTING CONNECTIVITY, WHILE
IMPROVING THE QUALITY OF THE ENVIRONMENT

QUALITATIVE INVESTIGATION

- Evaluation of curricula

QUANTITATIVE INVESTIGATION

- Questionnaires



EMPIRICAL INVESTIGATION



EVALUATION OF CURRICULA

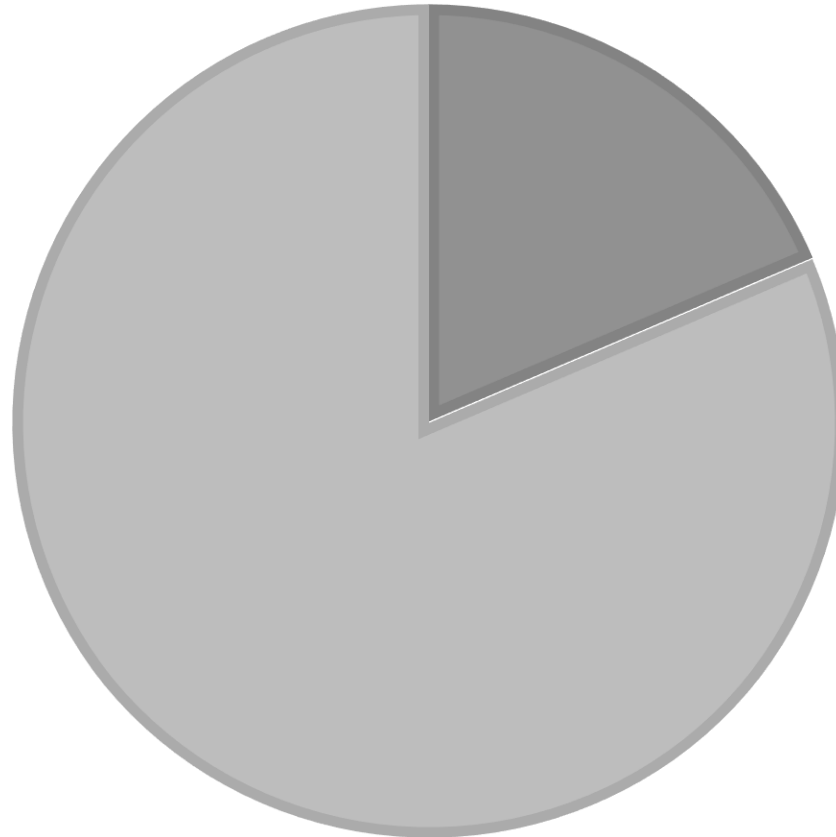


CRITERIA FOR EVALUATION

- Comparison of 3 SACPLAN accredited planning undergraduate qualifications
- NQF level 8
- 60 Modules evaluated
- GI inclusion determined by making use of SACPLAN's 'Environmental Management and Planning' competency as guideline
 - Natural systems
 - Environmental management and planning
 - Climate change
 - Sustainability



TOTAL PERCENTAGE OF MODULES INCLUDING GI

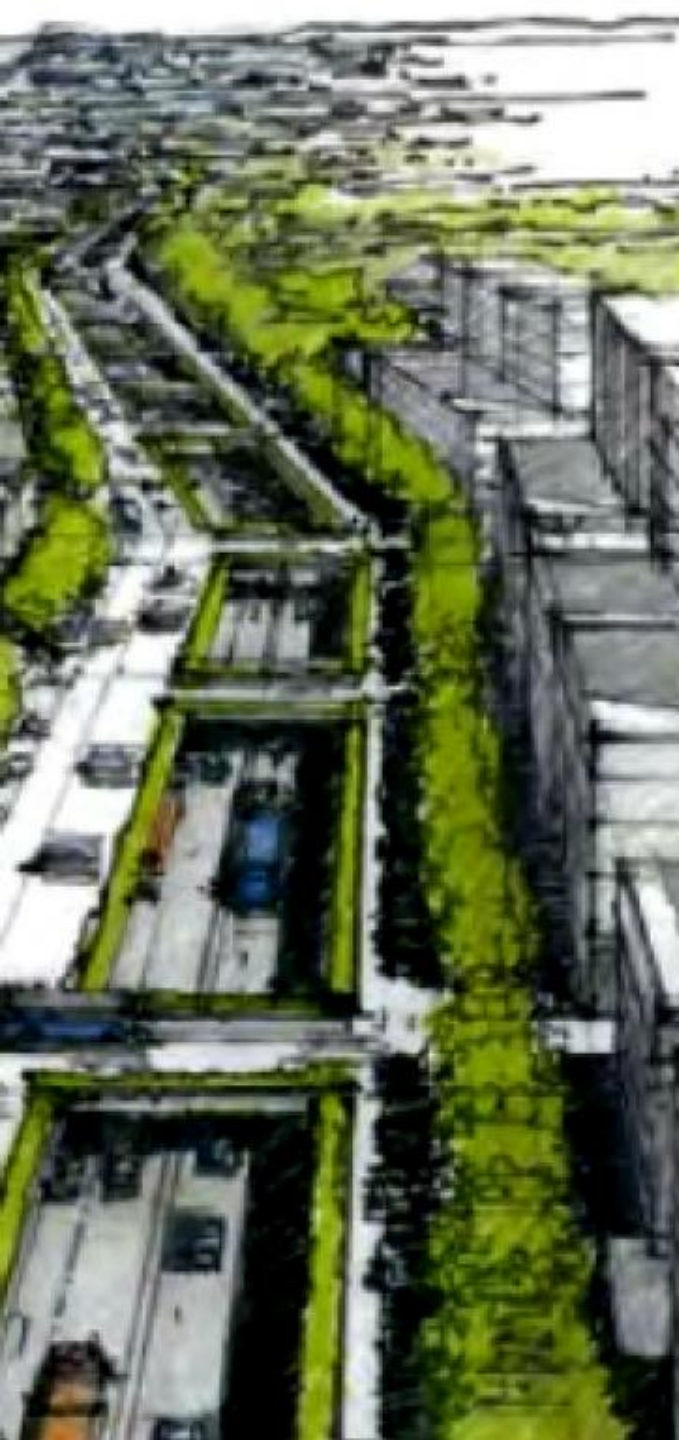


19%
of modules
include GI

81%
of modules
do not
include GI



QUESTIONNAIRES



DISTRIBUTION OF QUESTIONNAIRE

- Online questionnaire
- Compiled by making use of 'Sogosurvey'
- Anonymous
- 25 Questionnaires distributed among purposefully selected practicing planners
- 13 Completed questionnaires returned

STRUCTURE OF QUESTIONNIARE

- 14 Questions
- 3 Sections
 - Understanding of GI
 - Use of GI
 - GI education



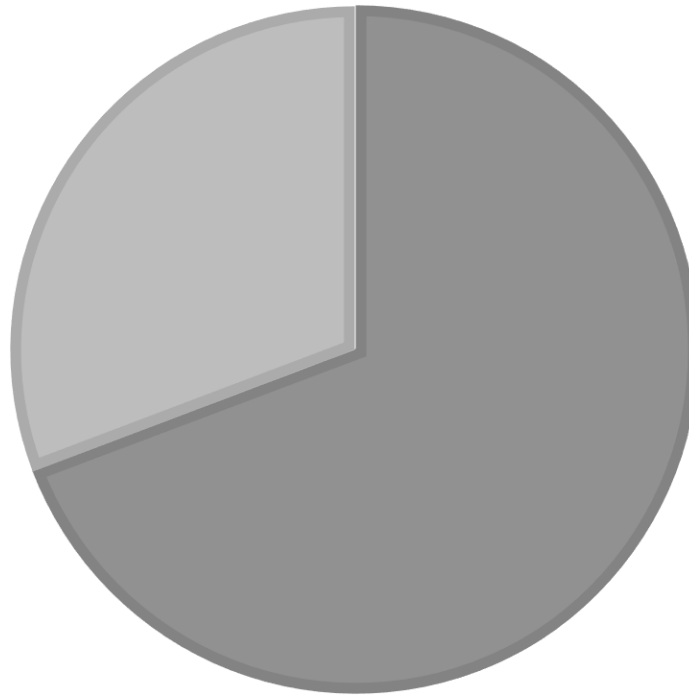
An aerial architectural sketch of a city block. The drawing shows a grid of streets with buildings on either side. Green spaces, including trees and grassy areas, are interspersed between the buildings. The style is a loose, hand-drawn sketch with some color washes in green and grey. The text 'UNDERSTANDING OF GI' is overlaid in large, bold, black capital letters.

UNDERSTANDING OF GI

LEVEL OF UNDERSTANDING

DO YOU KNOW WHAT GI IS?

(QUESTION 1)



31%

of respondents are unfamiliar
with the concept

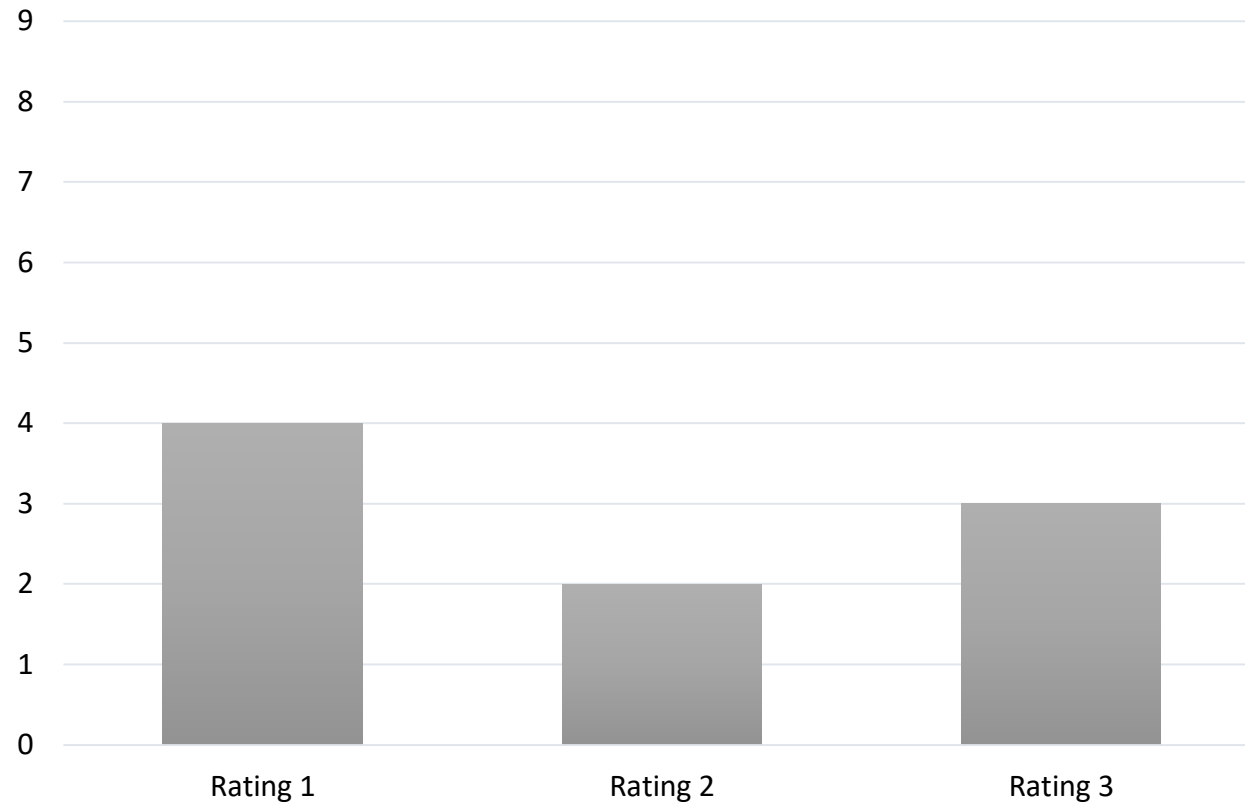
69%

of respondents claim to have
knowledge of GI



DEFINE GI TO THE BEST OF YOUR KNOWLEDGE?

(QUESTION 2)



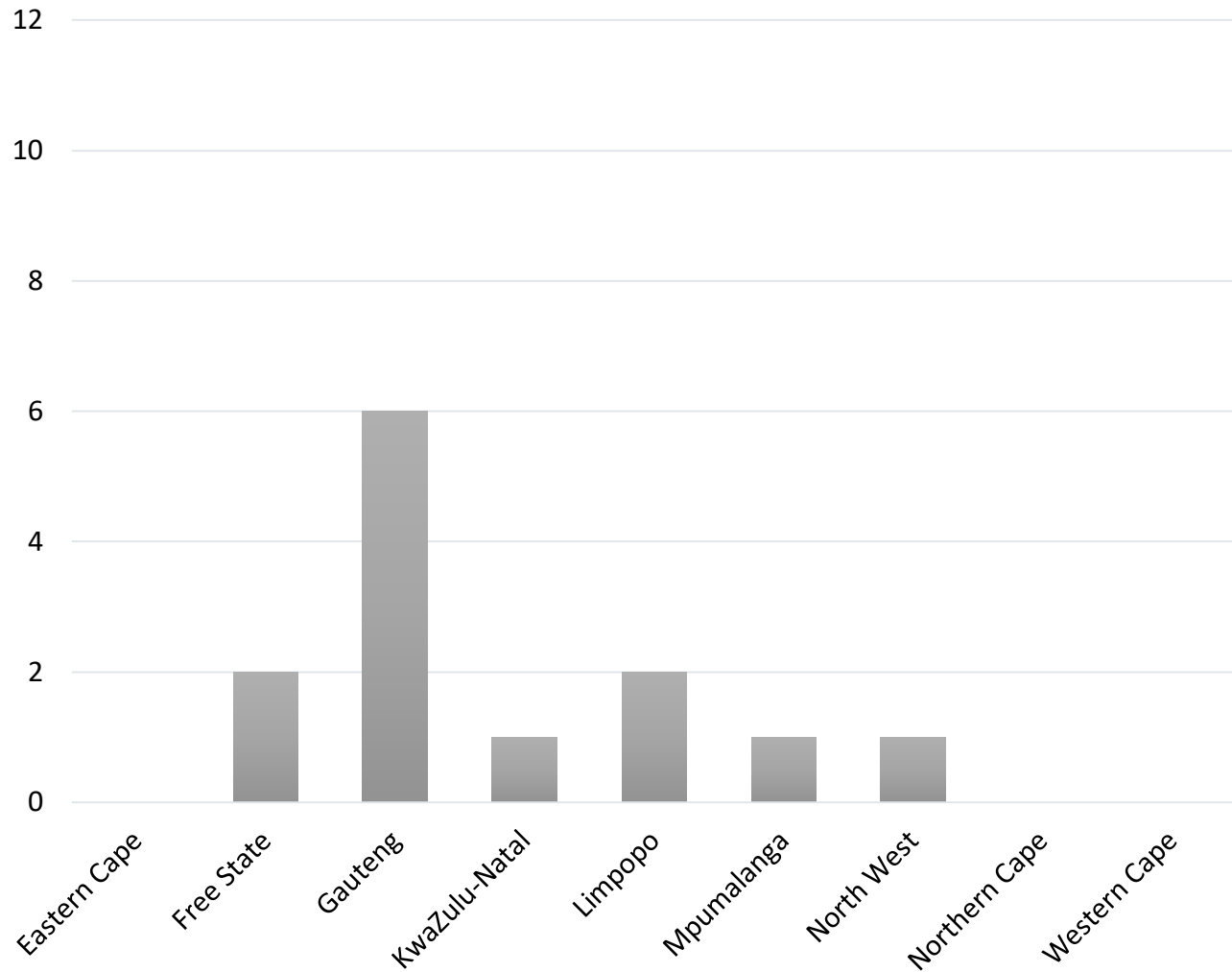
An aerial sketch of a city grid. The streets are drawn in grey, and the blocks are filled with light green, suggesting parks or green spaces. The sketch is done in a loose, artistic style with visible pencil or pen lines. The text is overlaid on the center of the image.

USE OF GI

DEMOGRAPHIC DATA & CURRENT GI USE

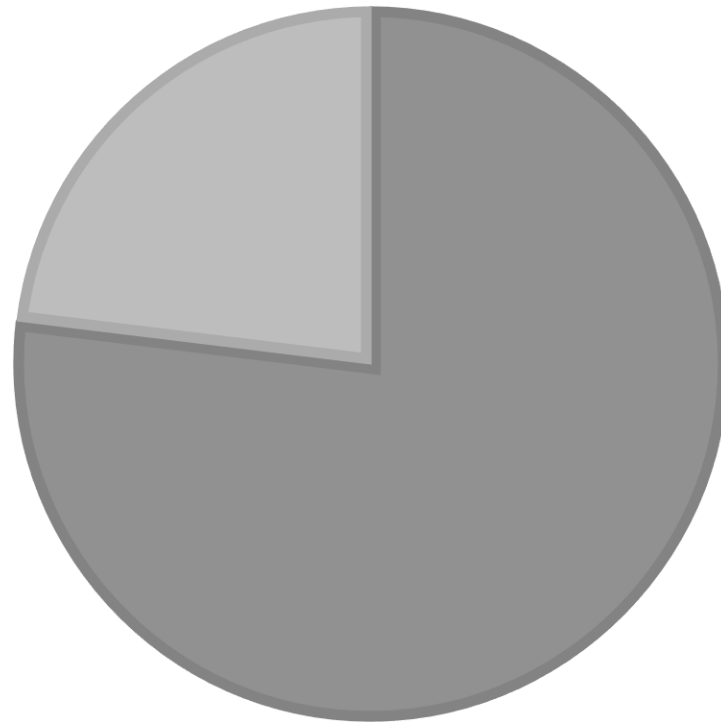
IN WHICH PROVINCE ARE YOU EMPLOYED?

(QUESTION 3)



IN WHICH SECTOR ARE YOU EMPLOYED?

(QUESTION 4)



23%

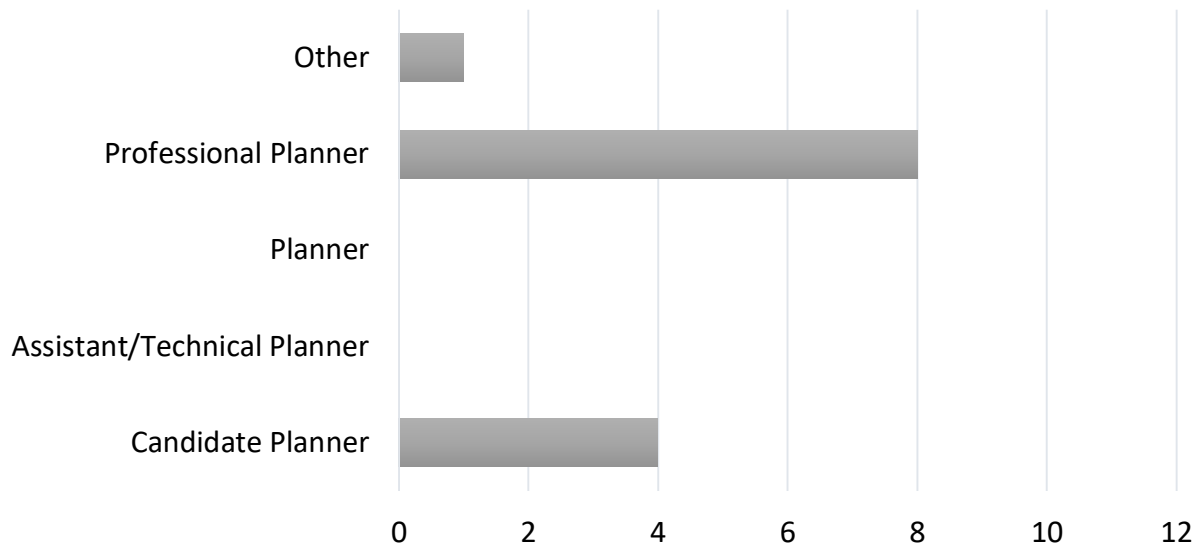
of respondents are employed in
the public sector

77%

of respondents are employed in
the private sector

WHICH SACPLAN REGISTRATION APPLIES TO YOU?

(QUESTION 5)



8%

of respondents
have no applicable
registration

31%

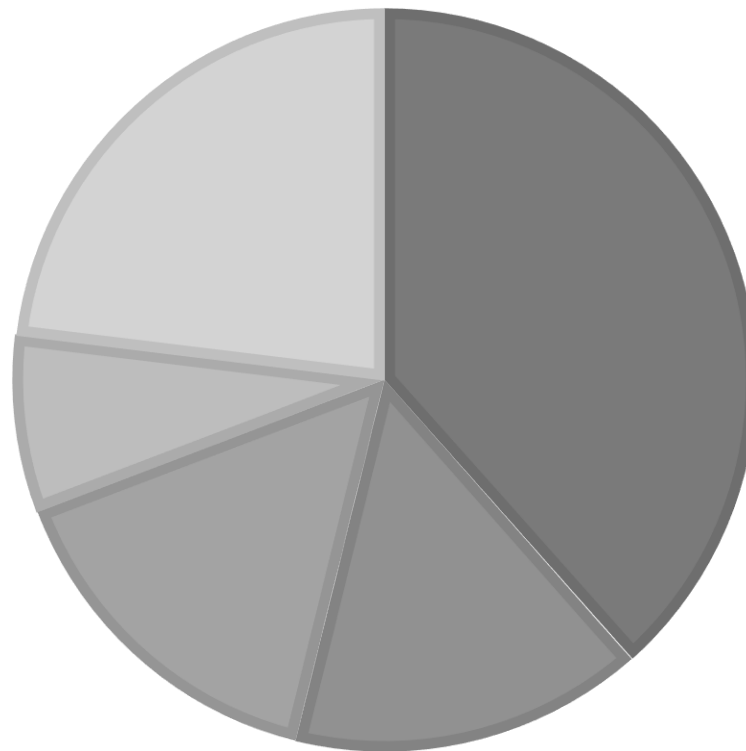
of respondents
are registered as
Candidate Planners

61%

of respondents
are registered as
Professional Planners

HOW MANY YEARS OF EXPERIENCE DO YOU HAVE?

(QUESTION 6)



39%

<4 years

8%

5-10 years

15%

11-15 years

15%

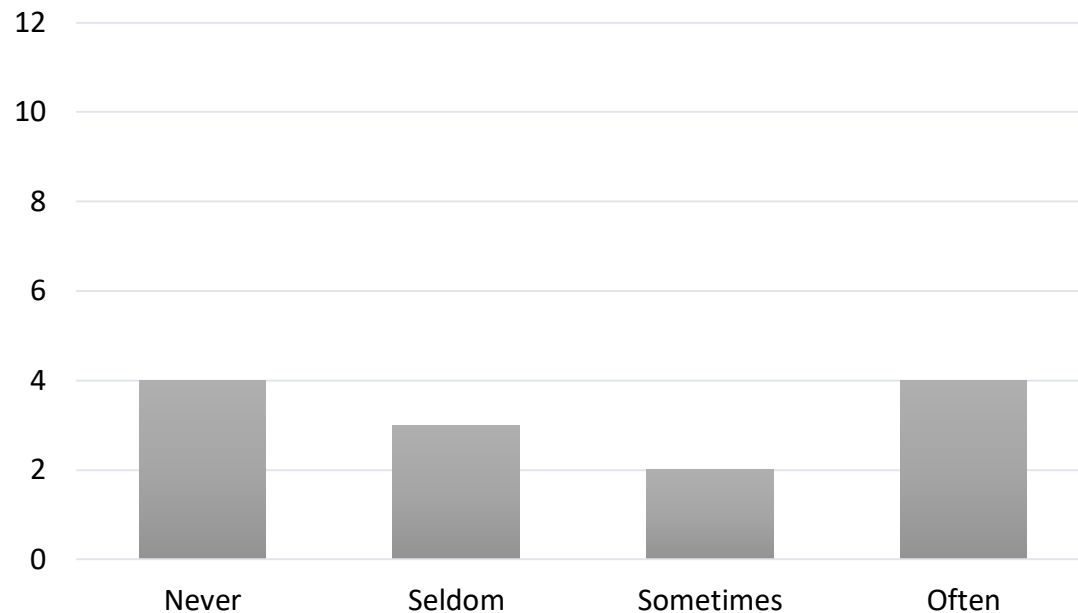
16-20 years

23%

> 20 years

HOW OFTEN DO YOU MAKE USE OF GI?

(QUESTION 7)



31%

of respondents
never
make use of GI

23%

of respondents
seldom
make use of GI

15%

of respondents
sometimes
make use of GI

31%

of respondents
often
make use of GI

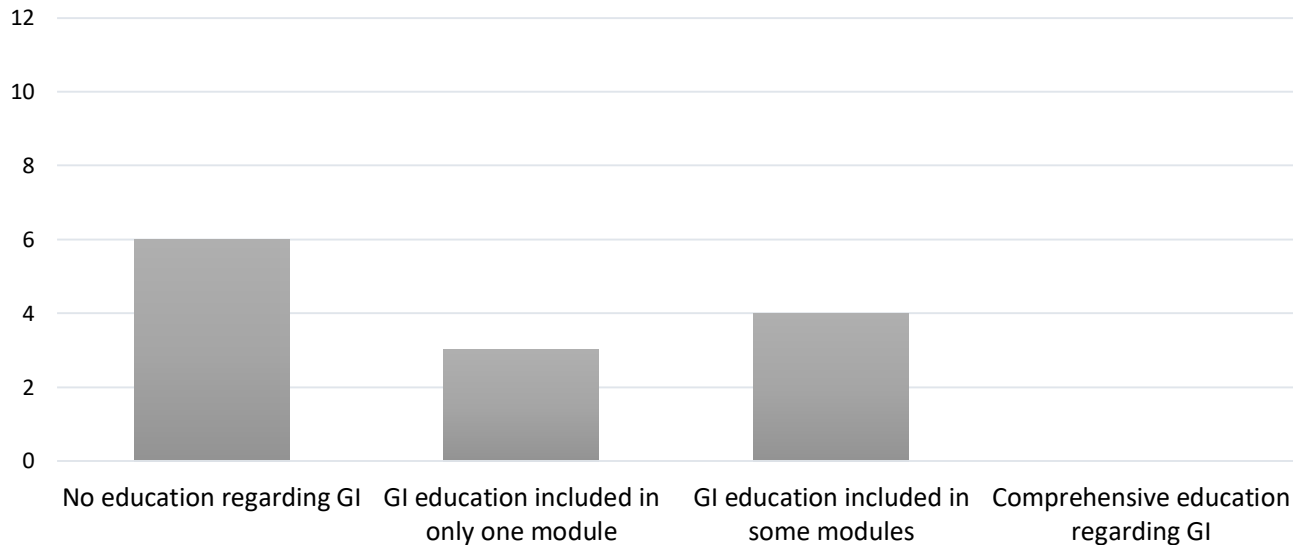
An aerial perspective sketch of a city grid. The drawing shows a series of rectangular blocks separated by streets. Green spaces, represented by light green washes, are interspersed between the blocks, particularly along the central vertical axis and at the corners of the blocks. The style is architectural and illustrative, with some areas appearing more developed than others. The text is overlaid on the central part of the grid.

GI EDUCATION

GI EDUCATION & NEEDS ASSESMENT

TO WHAT EXTENT WAS GI INCLUDED IN YOUR TERTIARY EDUCATION?

(QUESTION 8)



46%

received no GI
education

23%

GI included in
one module

31%

GI included in
some modules

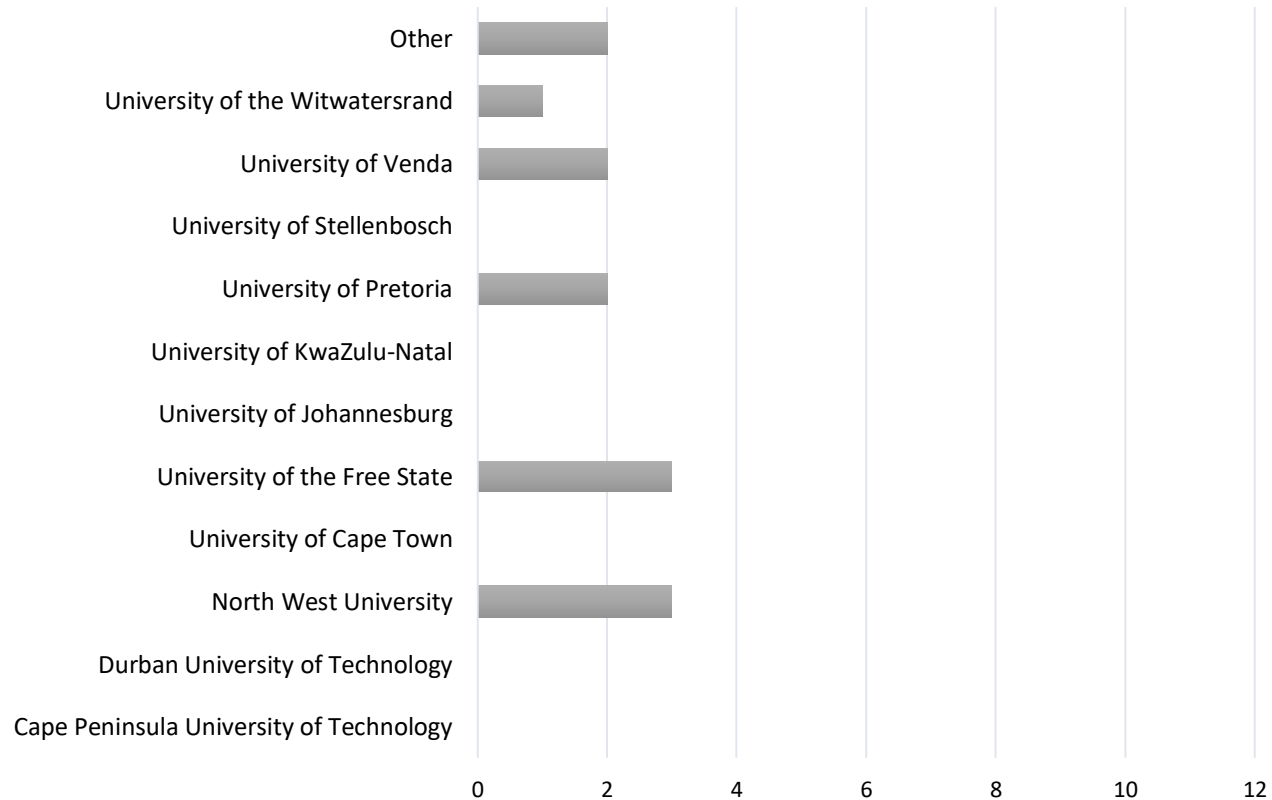
0%

comprehensive
GI education



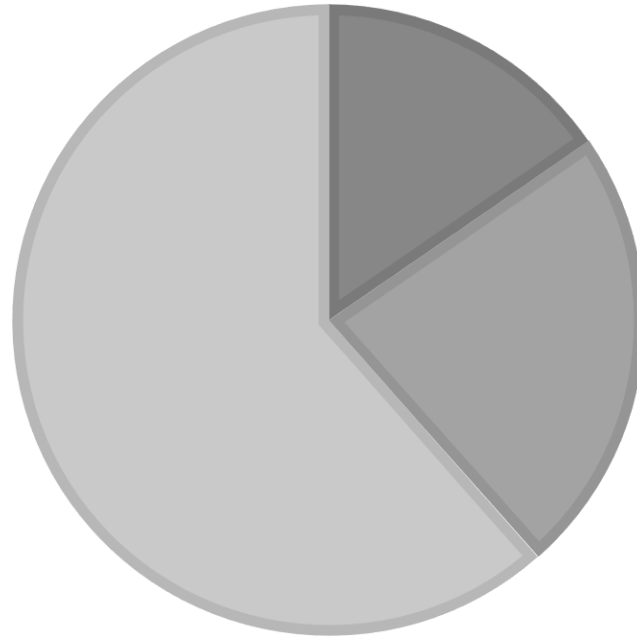
FROM WHICH INSTITUTION DID YOU GRADUATE?

(QUESTION 9)



IN WHICH YEAR DID YOU GRADUATE?

(QUESTION 10)



15%

of respondents
graduated before
1990

23%

of respondents
graduated between
1990 and 2000

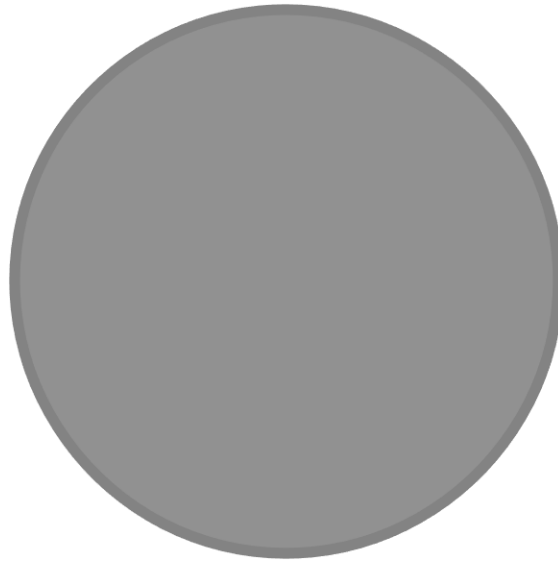
62%

of respondents
graduated since
2001



DO YOU FEEL THERE IS AN NEED TO IMPROVE TERTIARY GI EDUCATION?

(QUESTION 11)



0%

of respondents stated no
improvement is neccesary

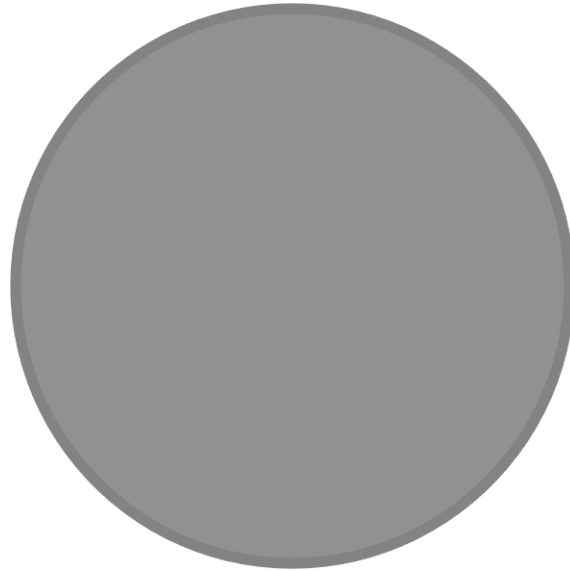
100%

of respondents stated that an
improvement is neccesary



DO YOU FEEL THERE IS AN NEED TO EDUCATE PLANNERS TO IMPROVE THEIR KNOWLEDGE OF GI?

(QUESTION 12)



0%

of respondents stated no
improvement is neccesary

100%

of respondents stated that an
improvement is neccesary



CONCLUSIONS

- Definition of GI in terms of planning
 - To date there is no consensus of what it entails in terms of planning.
- Extent of GI in tertiary planning education
 - Compulsory according to SACPLAN but lacking in current education approaches
- Perception of GI among planners
 - Incorrectly interpreted and understood by planners



RECOMMENDATIONS

- Need for universal definition of GI in terms of planning
- Recognise the importance of multi-disciplinary education and training approaches for planners
 - Explore multi-disciplinary teaching-learning strategies
- Enhance the extent of GI inclusion in tertiary planning education
 - Integrate elements in GI in more modules
 - Comprehensive GI modules



**THANK
YOU**

